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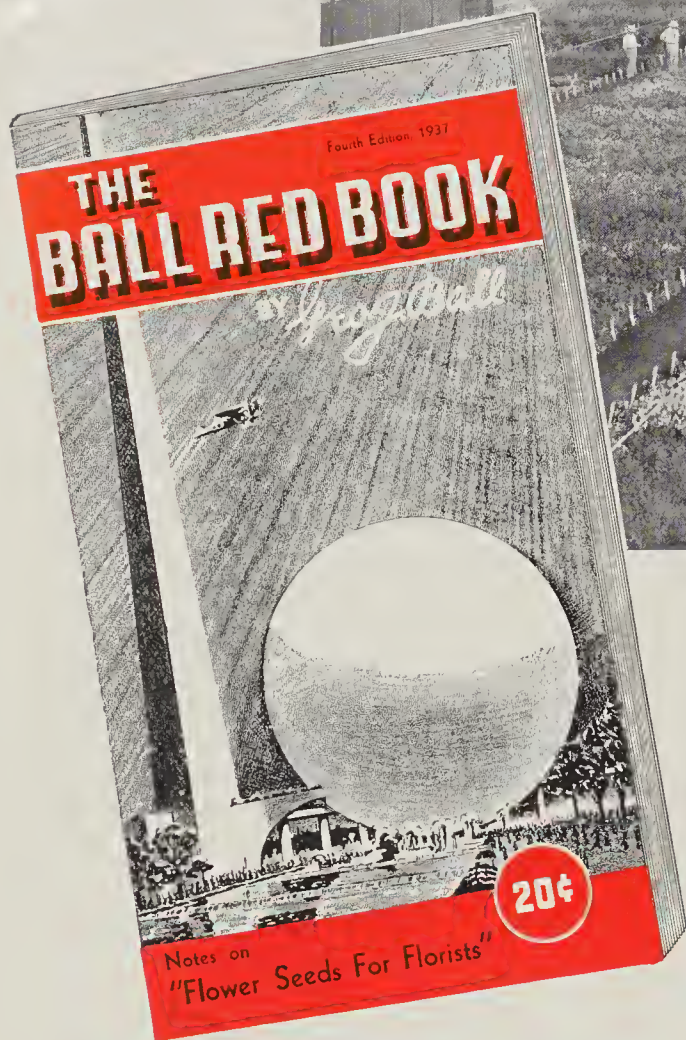
S. L. E.

"Flower Seeds for Florists"

NON-BRANCHING
STOCKS
BALL WHITE Imp.
MAY, 1938

Geo. J. Ball
I N C.
WEST CHICAGO
ILLINOIS

Catalog No. 33
July-Dec., 1938



We flower trials of ALL important lots of seed — three or four thousand a year. Above—visitors inspecting part of our trial ground of miscellaneous annuals.



The prosperity of any business, particularly that of a florist, is partly measured by dependable service as well as flowers. The florist in turn expects, and receives, complete service with his requirements. This should be particularly true of his flower seeds. We realize that growing conditions and demands vary greatly in such a broad land as ours; but when based on practical experience, service through the printed page can become of use. Information and experience we get from our greenhouses and trial grounds becomes yours through the above publications and special bulletins we issue.



To Our Friends—

We present this edition of our catalog to you with the conviction that the legislated depression every living American has lost under is slowly exhausting itself. Next winter we should feel some effects of revived business. While business, broadly speaking, cannot hope, at present, to really flourish, there are plenty of examples to prove that the enterprising and wide awake florist can, through efficient management, maintain himself or herself in a comfortable position. Cut flowers and plants must be grown so they will hold up and be presented in an attractive way. After producing, remember that well directed advertising is equally important, and the effective way to sell.

Geo. J. Ball.
President



Business Terms

We Pay Porcel Post Charges and Insurance to any post office in the United States or Canada on all orders at prices quoted in this catalog. This simplifies figuring the cost of your order.

Cash Discount. When remittance is enclosed with order, we allow a cash discount of 5% on all orders from \$1.00 to \$25.00. On \$25.00 or over, 8% cash discount is allowed. These discounts cannot be allowed on Cyclamen or Asparagus seed, prices on which are net.

If Unknown to Us, or if overdue accounts are standing (60 days), cash must be enclosed with order unless other arrangements are agreed to in advance.

Small Orders Are Welcome, gladly, and receive our well known service. In return we suggest cash be enclosed with such orders.

Air Mail Delivery. Allow 8c per ounce for seeds so ordered, which will allow for wrapping material.

Prices in this catalog and in all our offerings are subject to change without notice.

Crop Failures. All items in this catalog are offered subject to crop shortages or failures.

No 1/2 Tr. Pkts. supplied except where noted.

Important. Make all checks or money orders payable to **Geo. J. Ball, Inc., West Chicago, Illinois.**

Our Business and prices are exclusively for florists. We issue no retail catalog. Please do not give this catalog to amateur planters, or others who do not grow for sale.

No Commission Boxes. Our seed is not put up in packets suitable for resale to home gardeners.

No Crop Guarantee. For reasons that should be clear to any experienced planter, seed crops cannot be guaranteed. We use every precaution to supply only seeds of the highest quality in every respect, and we will promptly refund the price paid for same should they prove unsatisfactory under reasonable care. All seed is sold under the necessary seedsmen's disclaimer as follows:

Disclaimer. We, Geo. J. Ball, Inc., give no warranty, expressed or implied as to description, quality, productiveness, or any other matter of any seeds or plants we sell, and we will not be in any way responsible for the crop. If the purchaser does not accept the seeds or plants on these terms they are at once to be returned, and the money paid for same will be refunded promptly.

NOTE: Our seed cannot be bought from dealers or agents, EXCEPT IN OUR PRINTED PACKETS OR CONTAINERS. Avoid uncertainty and possible loss by ordering direct from us, or through our regular representatives.

Our Address is WEST Chicago, Illinois.

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To prevent mail becoming lost and misdirected, have one name for your business and use it exclusively. [1]

New and Tried Items

NOTE: Under this heading we draw your attention to varieties of special value. Our selection of this list is based on our trial ground and greenhouse experience with all these items. Such a list necessarily includes standard as well as new varieties. We trust you will examine this list with the same care we used in making it up.



BEGONIA, Indian Maid

We consider this a most attractive Semperflorens Begonia. The bright scarlet flowers contrast most effectively with the blackish brown metallic foliage, that is identical in color with the rose colored Carmen from which it is a break; extra attractive for either pot plants or bedding.

Tr. pkt., \$1.00; 1/64 oz., \$2.00; 1/32 oz., \$3.50.

BEGONIA, Mrs. Helen Harms

(New.) A tuberous rooted variety that comes about 90 per cent true from seed. Deep canary-yellow flowers about 1½ inches in diameter, with small foliage. Is much used in Europe for bedding. Produces tubers for the following year. Choice for bedding if partially shaded, watered freely when dry, and light soil is used.

Tr. pkt., \$1.00.

Although not all spikes of the new Giant Pacific Clear White are as fine as this one, we are convinced there is no finer white strain available.

CALCEOLARIA, Dwarf Tigered and Spotted

We believe this to be the most uniformly dwarf florist strain available. The flowers are large, attractively spotted, and produced in a gay mixture of colors. We find it especially attractive when flowered in 4-in. pots, for which sow around October 1st.

Tr. pkt., \$1.00; 1/64 oz., \$2.50; 1/32 oz., \$4.50.

CALCEOLARIA, Multiflora Nana

Generally considered the best pot plant strain because of its compact, free-flowering habit. The medium sized flowers also seem harder and hold up longer than do the larger Grandiflora types. The strain we are sending out this season will have some rich original colors that will add further value to it as a florist Calceolaria.

Tr. pkt., \$1.00; 1/128 oz., \$2.25; 1/64 oz., \$4.25.

CANDYTUFT, Giant Hyacinth-Flowered (Ball Strain)

We annually select the stock seed for our strain of this popular type in our greenhouses, and through this method have developed a uniformly excellent strain that produces 3, 4, to 5 flower spikes. We are certain the stock we are offering cannot be excelled. We find this white Candytuft type well suited to sowing around February 1st, and grown cool for late May flowering. White is the only color in this class, other colors being available only in the Umbellata type.

Tr. pkt., 20c; 1 oz., 75c; 4 ozs., \$2.35; 1 lb., \$7.50.

CINERARIA, Berlin Market Mixture

(Weissensee Strain.) For size of flowers, this famous strain is between the small Cremer or Multiflora Nana and the Grandifloras, combining the good points of both. The larger size of flowers gives them a clearly more distinctive appearance. Also, the colors are more attractive than Cremer's strain, being largely light-eyed and brighter. We feel certain that at least a portion of every lot of Cinerarias should consist of this strain.

Tr. pkt., \$1.00; 1/64 oz., \$1.60; 1/32 oz., \$2.75.

COREOPSIS, Sunburst

(New Gold.) A large percentage of this variety comes semi-double. Bright golden yellow with long graceful stems. Valuable for midsummer cutting. Though a perennial, we find it doesn't usually survive our winters beyond the second season. Tr. pkt., 20c; ¼ oz., 35c; 1 oz., 90c.

DELPHINIUM, Giant Pacific Hybrids

(Vetteric & Reinelt.) We offer the originator's strain. While we have not had an opportunity to test this newly developed strain, we have seen it growing on the grounds of the originator in California and believe it will be found a distinct improvement in size of flowers and hardness of growth. Available in **Blue shades, Lavender shades, Violet shades, and Mixture** of all colors.

Tr. pkt., \$1.25; ½ oz., \$2.00; ¼ oz., \$3.50; 1 oz., \$12.00.

DELPHINIUM, Giant Pacific White

(Vetteric & Reinelt.) Judging by what we have seen of this color in California, we are convinced it is the finest to be had in white Delphinium. Tr. pkt., \$1.75; ½ oz., \$3.00; ¼ oz., \$5.00; 1 oz., \$18.00.

DELPHINIUM, Lamartine

The rich violet-blue with small light center of this variety gives it distinctive appearance among the darker blue shades. Growth will also be found somewhat stronger and not easily blown over. Also, foliage of Lamartine is smooth and for that reason does not mildew so easily as do other varieties. In our trial grounds we find it earlier flowering than Belladonna, and perfectly hardy. Tr. pkt., 50c; ¼ oz., \$2.25; 1 oz., \$8.00.

ERYNGIUM, Bourgati

(New.) A quite distinctive addition to the ornamental everlasting group of perennials. The thistle-like flowers, as well as the growth, are bright steel-blue in color with deeply cut leaves. June flowering, 20-24 in., perfectly hardy. We are certain every retail grower should have a row of this perennial. Tr. pkt. only, 50c.

EXACUM, Affine Atrocoeruleum

This new variety will be found distinctly darker than the original variety Affine and is generally preferred. Exacum is an easily grown pot plant with richly scented flowers that are continuously produced. Should be protected from summer sun. Tr. pkt., \$1.00; 1/64 oz., \$2.25.

LUPINUS, Russell Strain

(Perennial.) Wherever hardy or perennial Lupins (Polyphyllus) are grown successfully, this new English strain should be used. The Russell Lupins excel in size of flowers and wider range of colors; awarded Royal Horticultural Society Gold Medal. We offer seed in originator's packets as follows: Pkt., 12 seeds, 25c; pkt., 50 seeds, 65c; 120 seeds \$1.25; 250 seeds, \$2.50.



All Double Giant Marigolds make popular cut flowers. They can be flowered in mid-winter.

of Special Merit

MARIGOLD, All-Double Orange

If this large flowered strain is sown about mid-August, seedlings spaced in shallow beds or flats, 4x4 in., they can be flowered for Christmas in a carnation house. The strain of All-Double Orange we offer will produce a higher proportion of double flowers than any Giant African strain, but flowers are not quite so large as are the true Giant African.

Tr. pkt., 25c; ¼ oz., 50c; 1 oz., \$1.50.

MARIGOLD, Australian Tree (Winter Flowering)

This variety is strictly winter, not summer, flowering and is distinctly valuable to any retail grower because of its bright coloring, which is a combination of mahogany and gold. Medium long stems and very free flowering, particularly when grown on a raised bench in a carnation house. Sow around August 1st and space 12x12 in.

Tr. pkt., 25c; ½ oz., 60c; 1 oz., \$1.00.

MATRICARIA, Ball Double White

Produces long-stemmed, clear white flowers that most growers prefer to the ordinary kind grown from cuttings because the flowers are harder and will stand handling better. Produces from 90 to 95 per cent full double, pure white flowers with some tendency to an anemone type center. Because of the uncertainty of seed crop, we suggest selecting this strain and propagating through cuttings after stock is worked up with seed.

½ tr. pkt., 30c; tr. pkt., 50c; ¼ oz., \$1.00; ½ oz., \$1.75.

MYOSOTIS, Ball Early (See cut)

This strain should be used exclusively for mid-winter greenhouse cutting because of its extra early flowering habit. An August sowing will flower in November, while a sowing of the regular Blue Bird at that time will not flower until the following February. Ball's Early produces rich, fairly dark blue flowers on good stems.

Tr. pkt., 25c; ¼ oz., 60c; 1 oz., \$2.00.

PANSY, Ball Giant Mixture

This is our best all-purpose mixture. It combines rich colors, size, and stem that makes it distinctive among medium priced mixtures for either bedding or cut flower purposes. This strain is especially rich in those original colors and markings that are doing much to increase the popularity of Pansies.

Tr. pkt., 40c; ½ oz., \$3.00; 1 oz., \$5.50; 4 ozs., \$20.00.

DON PANSY

(Ball Strain.) An extra-long-stemmed, upright growing strain, particularly suited to greenhouse cut flower growing. In our greenhouses we have been improving this strain through selection. The stock we offer is distinctly superior in length of stem to the original, but it continues to lack striking colors.

Liberal ½ tr. pkt., \$1.00; tr. pkt., \$2.00.

PETUNIA, All Doubles

We have a supply of all varieties listed with prices, on inside back cover page, and we call attention here to the need of a September sowing if 5-inch pot plants in full flower for Easter or the spring shows are wanted. This early sowing permits growing them cool, which is necessary for the best results. We particularly recommend **Snowball** for a pure fringed white. **Pink Perfection** is the best carmine-rose-pink, and the new variety **Gaiety** is especially attractive because of its irregular rose-pink and white markings.

POPPY, Olympia

(Orientele). Introduced last season by Ernst Benary of Erfurt, Germany. This variety is not a new one but it has heretofore been propagated only through divisions. The Benary seed we offer produces about 40 per cent semi-double flowers; bright glowing scarlet in color, the most attractive color in the hardy class. Perfectly hardy. Tr. pkt. only, 60c.

PRIMULA Malacoides, Brilliancy

Attractive deep rose-crimson, deepest shade in this class. Much used in combinations and plant arrangement.

Tr. pkt., \$1.00; 4 tr. pkts. for \$3.00.

PRIMULA Veris, Kleyni

A particularly valuable hardy Primula with extra long stems and large flower heads; golden yellow with apricot center. For spring forcing either in pots or for cutting, use outdoor-grown plants taken up in the fall and grown along cool during the winter.

100 seeds, 40c; 250 seeds, 85c; 1000 seeds, \$3.00.



Seed of all sown the same day, shows the value of Ball's Early for cutting or pot plants.

SCHIZANTHUS, Ball Dwarf

Of dwarf growth as pictured on page 18. About 20% persist in coming 6 to 8 inches taller than the true type. We find this strain especially valuable to flower in 4-inch pots during the spring months. For this purpose we suggest sowing in October and growing cool near the glass. This dwarf strain does not produce the brightly colored, large flowers found in the taller growing kinds and should be used only for pot plants. Tr. pkt., 50c; ¼ oz., \$1.00.

SCHIZANTHUS, Giant Blotched

Large flowered, attractively colored mixture that is made especially bright by a distinct dark blotch in center of each flower; few or no heavy colors. The strong upright growth of this strain makes it valuable for cutting. A sowing should be made in August and grown in pots for cutting. This sowing can be flowered in 5-inch pots in February. Every retail florist should plant Schizanthus for cutting, as they keep in perfect condition in water for as long as ten days. Tr. pkt., 50c; 1/16 oz., \$1.00.

STOCK, Non-Branching Gold Standard No. 17

(New.) We have been working for four years on this strain and have succeeded in developing a strictly non-branching, fairly deep canary-yellow with one fault, and that is all the singles and around 5 per cent of the doubles persist in coming pure paper white. True color of Gold Standard is a rich original one that we are sure will do much to further increase the popularity and value of Non-Branching Stocks. Available August 15th. ½ tr. pkt. only, 60c.

STOCK, Non-Branching Ball Pink No. 11

(New.) A limited supply of this new rose-pink variety was sent out last season, and we are glad to note this color has given general satisfaction. For the present season we have a good supply of our own growing of seed. This variety is strictly non-branching, 60 per cent double flowering, and is especially recommended for winter or dark weather flowering. ½ tr. pkt., 60c; tr. pkt., \$1.00; ¼ oz., \$2.25; 1 oz., \$8.00.

STOCK, Non-Branching Ball White Imp. No. 15

(New.) Introduced exclusively by us this season, this strain will be found long-stemmed, strictly non-branching, and pure paper-white, overcoming entirely the objectionable pink tinge in our original Ball White. Percentage of doubles will be found at about 60 per cent. We will have a good seed supply of our own growing ready to send out August 15. Our new No. 16 is identical to No. 15 except that it is not quite so tall, so may be more desirable under some conditions. See page 5 for description. ½ tr. pkt., 60c; tr. pkt., \$1.00; ¼ oz., \$2.25; 1 oz., \$8.00.

EARLY SWEET PEA, Ball Orange Improved

The only pure orange-colored early-flowering variety on any list. All other so-called orange are slightly shaded with cerise.

½ oz., 30c; 1 oz., 45c; 4 ozs., \$1.60; 1 lb., \$5.50.

EARLY SWEET PEA, Princess Blue

This new MacDonald variety we find quite outstanding for long stems and extra large, light lavender-blue flowers, described by the originator as Belladonna blue. It very well deserves to be among the 12 Best Early Flowering Sweet Peas of today because of its outstanding size, stem, and color that can be used for either lavender or light blue.

½ oz., 30c; 1 oz., 50c; 4 ozs., \$1.75; 1 lb., \$6.50.

STOCKS

The photo at bottom was made at the most favorable season for flowering Stocks, early May. For this reason the flowers are so well placed on the stem. Mid-winter conditions tend to draw the growth, and this, of course, spaces the flowers farther apart, particularly if grown on a deep ground bed.

Of the two distinct types of Stocks, the Non-Branching will be found distinctly more profitable, particularly for market growers. We are certain every retail grower can use some of this fine long-stemmed, large-flowered type to excellent advantage. The cultural needs of the two classes are identical and simple: Cool or moderate temperature, plenty of air, and clean soil. These points are fundamental and must be provided if a profitable crop is to be produced. A night temperature of 55 degrees or higher will tend to make them come blind and worthless.

The finest Stocks we ever produced were in a house that got down to 25 degrees on sub-zero nights. When well hardened, they will stand a surprising amount of frost. Stocks of all classes are worthless for summer flowering in our latitude because excessive temperatures force them into blind growth. Farther north, especially in Canada, they usually are all right in summer. Plenty of air is necessary to get a strong, stiff growth into Stocks, such as will not wilt after cutting. All of our Stocks are grown in old soil, but we find it necessary to sterilize it

for each crop. For this purpose we depend entirely upon saturating our soil with 200-degree hot water. When this is done thoroughly, we find it quite effective for getting our soil into excellent condition for this crop.

We know of two practical methods of increasing the proportion of doubles in Stocks. One is the removal of weak seedlings, and this we find the most effective. The other is based upon the fact that when the edge of the leaf is wavy or inclined to be indented and broad, the plant will be double flowering. Smooth-edged and rather light, narrow-leaved plants will usually come single.

WHEN TO SOW

We have gradually advanced our earliest sowing date to the first few days in July, finding this safe in our latitude. If a raised bed and a 48-degree house are used, this early sowing can sometimes be flowered for Christmas under normal November and December weather conditions. The beds should be ready to plant a summer sowing into, two weeks after the sowing is made, for they grow rapidly at this season. Sowing of Stocks can be made at any time after early July and up to February 15th in our latitude. A March 1st sowing will usually come blind or partly so for us. For more detailed growing suggestions, consult the fourth or latest edition of your *Ball Red Book*. A circular fully covering our experience with Stocks will be sent gratis on request.



Mother's Day crop of our Ball White Improved No. 15. Paper-white, long-stemmed and strictly Non-Branching. Around 60 per cent doubles.

BALL Non Branching STOCKS

Our leading greenhouse work today is the improvement of Non-Branching strains of Stocks. We find it exceedingly difficult or impossible to increase the percentage of doubles, but we are making headway in improving the non-branching habit of this class, and the development of new or better colors. Through this work, and by demonstrating the market value of this class, we are the generally accepted source of seed supply for what has become known as "Ball Stocks." Because they produce little more than one stem or flower spike, seed production is limited. Also, with a few exceptions, the proportion of doubles is somewhat less than the Branching or Bismarck class. Nevertheless, the demand for seed has, with us, exceeded the supply, though we have tried every year to build up a reserve. However, the present season we expect to have ample supplies of all the leading market colors. We call particular attention to our two new strains of Ball White Improved. Both these pure whites have excellent points, and we find it difficult to prefer one over the other. To avoid error in ordering seed, please use name and number.

Note Prices Though we have used much time and space developing them, no advance is made in price of our new varieties. All, including mixtures, are priced alike as follows:

½ tr. pkt., 60c; tr. pkt. (about 1000 seeds), \$1.00; ¼ oz., \$2.25; 1 oz., \$8.00.

***No. 17—Gold Standard.** (New.) Our latest development in Non-Branching Stocks. This pleasing canary-yellow comes 95 per cent strictly non-branching. But all the singles and 3 to 4 per cent of the doubles come pure white! Both are excellent colors. See Novelty List, page 3, for further description. Ready in August. **Tr. pkts. only.**

***No. 15—Ball White Improved.** (New.) Long-stemmed, strictly non-branching, and pure paper-white correctly describes this valuable new variety. Seed crop will be ready about August 15th. See Novelty List, page 3, for further description; also color illustration on cover.

***No. 16—Ball White Improved, Medium Tall.** (New.) About 6 inches shorter than our No. 15, but with flowers closely set, paper-white, and about a week earlier than No. 15. We suggest the use of No. 16 for winter or dark weather flowering, because its more compact growth will leave flowers better spaced. No. 15 we prefer for late winter and spring flowering. Ready Aug. 15th.

No. 2—Ball White, Medium Tall. (Tinged.) About the height of our No. 16, or plenty long-stemmed for cutting. Has been supplied by us for several years and is generally well liked. So lightly tinged that it readily sells for white.

No. 2—Ball White. (Tinged.) This is the tall, long-stemmed white we have been regularly supplying for this color. It is excellent stock, fully 60 per cent double, and is practically pure white.

No. 4—Ball White Dwarf. With us 20-24 in. tall in deep ground beds. Easily handled in flats.

No. 12—Snowbank. Pure white, medium long-stemmed with flowers not closely spaced on the stem for winter use, but an excellent variety for spring flowering.

***No. 1—Lilac-Lavender.** Most valuable cut flower color in any market. Medium long-stemmed and fairly early flowering. Around 65 per cent double.

***No. 3—Ball Blue.** Developed by us from Lilac-Lavender, that it exactly resembles except in color, which is dark lilac-blue. An excellent color.

***No. 11—Ball Pink.** (New.) Light rose-pink, the exact shade of Bismarck Rose. We are glad to say that in originating and introducing this variety we have added an attractive market color to this class. This variety is a shade lighter and ten days to two weeks earlier than our No. 14. We recommend No. 11 for midwinter or early spring flowering. It gets a trifle light when flowered in May or warm weather. See Novelty List, page 3, for further description.

***No. 14—Ball Rose-Pink.** This is a selection from our No. 11 for deeper color. It is rose-pink, not a deep heavy rose. Long-stemmed, therefore about ten days later than our No. 11. Good market color.

No. 7—Molmaisan Pink. Extra-long-stemmed light or shell-pink. Rather light when flowered during midwinter, but a pleasing shade in spring.



Medal Awarded "Ball Stocks"
S. A. F. National Show, 1931

No. 8—Ruby. Rich crimson-red and long-stemmed. Outstanding for a strong bright red, but not wanted in quantity. The variety *Illusion* is practically the same in color and some shorter stemmed, so will be dropped by us.

No. 9—Chamois-Pink. Apricot or chamois-pink. Medium long-stemmed, therefore earlier flowering. A pleasing color but uncertain in proportion of doubles.

No. 10—Ball Non-Branching Mixture. This mixture is made up by us and consists of all the above varieties except the new Gold Standard. Recommended where a limited number of all colors is wanted.

Prices on ALL VARIETIES above:

½ tr. pkt., 60c; tr. pkt. (about 1000 seeds), \$1.00; ¼ oz., \$2.25; 1 oz., \$8.00.

15,000 SEEDS PER OUNCE

Please note that part of any lot of Stock seed is not fully enough matured to germinate and that such seed cannot be separated. 10,000 seedlings from an ounce is a good stand. We do not send out any seed that does not test out to this figure.



STOCKS, Branching

(17,000 seeds per ounce)

A good proportion of a retail grower's planting of Stocks should consist of this class. Though shorter stemmed than the Non-Branching kind, they are more freely produced and their choice colors and the rich odor of all Stocks make them valuable for many kinds of work. Also the proportion of doubles averages some higher. Some growers use them for market too, but we find them a mistake for this purpose. They can be spaced close and run up single stemmed, but individual flowers are not so large or well spaced on the stem as are the Non-Branching kinds. A better plan with the Branching is to space them 6x6 in.; and when up about 8 in., top back about one-third. Another good plan is to let them go until buds are far enough along to distinguish the singles, which are

then removed. The remaining doubles, if growing conditions are favorable, will nicely fill out the irregular empty spaces left by removing the singles and leave a clear bed of all doubles.

Among the Branching classes the Bismarcks are clearly superior in earliness and proportion of doubles. California growers are developing improved strains of Bismarcks known as Super Giants of California or California Giants. These strains are a distinct improvement in stem length and size of flower. Santa Maria and Shasta are the original varieties in this stronger growing class; in addition, we list the following varieties of this improved class that our trials show are superior.

Stars (*) indicate varieties we find superior.

GIANTS OF CALIFORNIA OR SUPER GIANTS

***Pacific.** Large, rich, fairly dark blue with extra stem and growth; about color of Bismarck Lilac.

***Yosemite.** About the shade of Bismarck Rose; a strong, clear color with extra heavy growth.

***Santa Maria.** Generally accepted as the best branching clear white; distinctly stronger than Bismarck White.

Raselight. Similar to Yosemite; some later and stronger growing. We feel it worth listing for difference it might show under other conditions than our own.

Prices of above four varieties: Tr. pkt., 35c; ¼ oz., \$1.15; 1 oz., \$4.00.

Mixture of all colors in this new class. Tr. pkt., 25c; ¼ oz., 90c; 1 oz., \$3.50.

IMPROVED BISMARCKS

Antique Copper. Fine copper-red.

Apple Blossom. An extra delicate pink; nearly white under some conditions.

Blood-Red. Ruby color.

Buttercup. Deep cream, strong growth.

Chamois. Fine clear chamois.

***Elk's Pride.** Rich deep purple.

Flesh. Delicate shade of Malmaison-pink.

***Golden Ball.** Clear ivory-yellow.

Golden Rose. As named.

***Lovender.** Clear lilac-lavender; fine.

Lilac. Bright deep lilac-blue shade.

***Rose.** Fine bright rose.

***Shasta.** New giant white.

White. Good clear white.

Prices each: Tr. pkt., 35c; ¼ oz., \$1.00; 1 oz., \$3.00.

Mixture. All above colors. Tr. pkt., 25c; ¼ oz., 60c; 1 oz., \$2.25.

PERPETUAL BRANCHING (Giant Perfection)

Similar to the Bismarcks but not quite so tall.

Empress Augusto Victorio. Silver-lilac and very fine.

Heatham Beauty. Terra cotta or golden rose; very fine.

Rose. A clear even shade.

Snowdrift. Fine clear white.

Prices each: Tr. pkt., 25c; ¼ oz., 60c; 1 oz., \$2.25.

Mixture. Tr. pkt., 25c; ¼ oz., 50c; 1 oz., \$1.75.

BEAUTY OF NICE

Of compact habit like Ten Week but not quite so dwarf.

Auraro. Golden-buff; fine.

Flesh-Pink (Beauty of Nice). Flesh or Malmaison-pink.

Cate D'Azur. Light lavender-blue.

Mont Blanc. Clear extra early white.

Mante Carla. Rich canary-yellow.

Queen Alexandra. Rosy lilac; fine.

Prices each: Tr. pkt., 25c; ¼ oz., 60c; 1 oz., \$2.25.

Mixed. Tr. pkt., 25c; ¼ oz., 50c; 1 oz., \$1.75.

TEN-WEEK

Dwarf, compact, and early; used for bedding and pot plants.

Blood-Red.

Canary-Yellow.

Carmine-Pink.

Deep Rose.

Lovender

Purple.

White.

Prices each: Tr. pkt., 25c; ¼ oz., 50c; 1 oz., \$1.75.

Mixed. Tr. pkt., 25c; ¼ oz., 50c; 1 oz., \$1.60.

[6] *Half or more of a retail grower's Stocks should be of the branching class; shorter stemmed but more of them.*

BALL CALENDULA

(3000 seeds per ounce)

Originated and Introduced by us 18 Years Ago

The most profitable Calendula crop is from the sowing made, in our latitude, August 1st, and that is in full crop for Christmas and January. We sow in our cloth houses to protect the seedlings from the same yellows that affect Asters. Calendula seed is coarse and should be well covered and kept uniformly moist. After seedlings are well started, keep the soil rather dry or the growth will run up ruinously soft during the heat of August. After September 1st we plant indoors 12x12 inches. We close vents in our Calendula houses only to keep out storms and frost until steady firing begins. After that maintain a night temperature of 45 degrees. This treatment produces strong, hard growth and large flowers that will not wilt after cutting; and such hardened growth will not mildew. Aphids draw the life out of Calendula rapidly and must be kept down.

Our strains of Calendula produce 98 to 99 per cent full double flowers unless the growth is starved or weakened by too much heat, poor soil, or lack of enough water. Cutting a heavy crop also checks or weakens the growth, causing singles to develop as the crop gets cut down. Further details on Calendula culture will be found in your *Ball Red Book*.

Please Note: Our strains of Ball Calendula are to be had only in our sealed packets.

FOLLOWING ARE OUR GOOD STANDARD KINDS

***Ball's Improved Long Orange.** (New.) Attractive bright golden orange with light eye; a clearer lighter color than our regular Long Orange. Quite outstanding for extra large flowers and long stems; excellent for cutting.

***Ball's Long Orange.** Long-stemmed, clear orange with light center; well liked for its deep strong orange color.

Sensation. Similar to our Ball's Long Orange.

***Ball's Masterpiece.** Long-stemmed, clear orange with dark center. The attractive contrast of the dark eye makes this variety quite popular.

Ball's Supreme. Similar to Masterpiece, but some lighter colored. Flower size and stem length medium, but unusually free flowering.

***Ball's Gold.** Extra long-stemmed, large deep golden yellow. Doesn't branch so freely, so we plant some closer, say 10x12 in.

***Ball's Lemon Queen.** Deep lemon-yellow with attractive dark brown eye. Very effectively contrasting colors, and our most popular yellow.

Ball's Apricot. Light straw or buff color with showy dark center. Color varies some, but a quite attractive strain.

Prices on each of the above Ball Calendula: Tr. pkt., 40c; 1/4 oz., 60c; 1 oz., \$2.00; 2 ozs., \$3.50; 4 ozs., \$6.50; 1 lb., \$20.00.

Ball Calendula Mixture. Made up of the above varieties with fully half orange. Intended for retail growers whose space is limited.

Ball Art Shades Mixture. Contains many original and interesting color effects, many being new in Calendula and hard to "true up".

Prices on both above mixtures: Tr. pkt., 35c; 1/4 oz., 50c; 1 oz., \$1.50.

Note: Prices on weight lots will be accepted on two or more varieties together. For instance, on 1/4 oz. each of four varieties instead of allowing 60c each or \$2.40 for the four lots, the ounce price of \$2.00 will be accepted.



A Christmas Crop of Our Ball Calendula

CALENDULA FOR BEDDING

Following varieties are of compact growth not suitable for cutting because short-stemmed, but highly attractive for bedding except during very hot weather.

Orange Shaggy. Petal tips of this bright orange variety are finely fringed, giving it a distinctive appearance.

Tr. pkt., 15c; 1/4 oz., 25c; 1 oz., 75c.

Apricot Queen. An apricot-buff with petal tips attractively flecked orange.

Tr. pkt., 20c; 1/4 oz., 35c; 1 oz., \$1.10.

Frilled Beauty. New deep orange, attractively frilled flowers.

Tr. pkt., 15c; 1/4 oz., 25c; 1 oz., 85c.

Sunshine. Loose petaled, bright yellow, upright growth with good stems. Identical to Chrysanth.

Tr. pkt., 15c; 1/4 oz., 25c; 1 oz., 85c.

Prices of the following, each:

Tr. pkt., 15c; 1 oz., 50c; 2 ozs., 90c; 4 ozs., \$1.75; 1 lb., \$5.75.

Radia. Bright orange, quilled petals, quite attractive.

Radia Golden Beam. Clear yellow Radia.

Orange King. Dark centered deep orange; for bedding.

Lemon Queen. Light lemon-yellow. Somewhat taller growth.

Ball Bedding Mixture. Well proportioned mixture of all dwarf bedding varieties.

Winter-Flowering PEAS

(350 seeds per ounce)

Striking improvements in color, length of stem, and size of flowers are available in Winter Peas. While not so largely used as they once were, when well grown they never fail to attract and please all classes of flower buyers—and this will always be so.

When Peas don't grow normally well, 9 times out of 10 it is due to rotting of the roots that prevents the flow of life to the vines. Rot develops and spreads rapidly in greenhouse soil because it is not exposed to the sterilizing or cleansing effect of frost, heavy rains, and sun. For this reason it must be annually changed or sterilized for Peas, because the roots seem more sensitive than those of most crops to this rot. We find saturating or washing it with hot water the most efficient and economical way of treating it, getting better results from old soil so treated than we do with fresh. New edition (4th) of our *Ball Red Book* supplies full details on soil sterilizing; it also describes our sub-irrigating of Peas, through which we clearly get better results.

THE 12 BEST VARIETIES

We realize the responsibility of offering this annually revised list of what we consider the best varieties. Growing conditions and treatment differ most everywhere, producing varying results with varieties. Every one selected for this list is carefully considered and impartially decided, on the basis of the popular demand as well as on our experience with them. For this reason new and old varieties will be found in it. We believe it will be to your interest to consider this list as carefully as we have.

Ball Rose Improved. On every impartial list of best varieties and our heaviest seller because of its fairly deep sparkling rose color; medium long-stemmed. Our improved strain of Ball Rose has been known as "U" and will be used exclusively for both winter and spring flowering.
½ oz., 20c; 1 oz., 35c; 4 ozs., \$1.20; 1 lb., \$3.75.

Majestic Rose. Clear, fairly deep rose-pink; of fine size and color. Stems medium long and extra heavy. Josie of same color is dropped from this preferred list because stems are not heavy enough, especially for midwinter.
½ oz., 20c; 1 oz., 30c; 4 ozs., \$1.00; 1 lb., \$3.50.

Triumph. Extra long-stemmed lilac-mauve. A new and valuable color in the Early class and an effective one for many kinds of cut flower work. Clearly improves Mauve Beauty and Cattleya.
½ oz., 20c; 1 oz., 35c; 4 ozs., \$1.20; 1 lb., \$3.75.

Ball Orange Improved. The only pure orange in the Early class, entirely without cerise shading. No orange variety is sun-proof, and the growth and flower stems of all such are comparatively short. Ball Orange Improved belongs in this preferred class because it is the only early flowering, pure orange. See Novelty List, page 3, for further description.
½ oz., 30c; 1 oz., 45c; 4 ozs., \$1.60; 1 lb., \$5.50.

Harmony. We continue to find this the best lavender. Long-stemmed, vigorous growth with some rose shading.
½ oz., 20c; 1 oz., 30c; 4 ozs., \$1.00; 1 lb., \$3.50.

Mrs. Hoover. Continues the best long-stemmed mid-blue. Makes an extra strong tall growth when planted early on ground beds.
½ oz., 20c; 1 oz., 30c; 4 ozs., \$1.00; 1 lb., \$3.50.

Princess Blue. This is an example of the new, extra strong growing, large flowered, long-stemmed class that we are working into. Princess Blue is a light lavender-blue that can be used for either of these colors. See Novelty List, page 3, for further description.
½ oz., 30c; 1 oz., 50c; 4 ozs., \$1.75; 1 lb., \$6.50.

12 Best Mixture. Balanced mixture of the above 12 varieties.
½ oz., 20c; 1 oz., 30c; 4 ozs., \$1.00; 1 lb., \$3.50.



New Winter Sweet Pea, Daphne—attractive salmon-pink; excellent commercial color

Laddie Improved. A shade lighter rose-pink than Majestic Rose but with extra long stiff stems and larger flowers. Growth is vigorous and free flowering.
½ oz., 20c; 1 oz., 30c; 4 ozs., \$1.00; 1 lb., \$3.50.

Sequoia. Belongs to the extra long-stemmed, large flowering class. Fairly deep rose shaded salmon. Shows up well with us during winter and spring.
½ oz., 20c; 1 oz., 35c; 4 ozs., \$1.20; 1 lb., \$4.00.

Boon. A highly pleasing, even salmon-rose-pink, with extra large flowers. There is an interesting demand for this attractive color class that is at its best under spring weather conditions. Boon, however, shows up fine with us throughout the winter months as well.
½ oz., 20c; 1 oz., 35c; 4 ozs., \$1.20; 1 lb., \$3.75.

Bridesmaid. Light silvery rose-pink. Extra large flowered and long-stemmed. Bridesmaid introduces a new shade in Early Peas and a choice one for any season.
½ oz., 20c; 1 oz., 35c; 4 ozs., \$1.20; 1 lb., \$3.75.

Ball White. This is clearly the best pure white. Long-stemmed and large flowered. Also white-seeded, therefore, must be sown in fairly moist soil and not watered until well up. During summer we suggest covering row with a board to prevent surface soil drying. Black-seeded whites are easier to germinate but not so true in color or form.
½ oz., 25c; 1 oz., 40c; 4 ozs., \$1.35; 1 lb., \$4.50.

WINTER PEAS—STANDARD LIST

The question of varieties in Winter Peas or any other crop we grow is very important. Varying growing conditions and markets explain why this is so, and it pays well to give it attention, especially if you grow for market, in which case you will want to stay close to the best standard colors. Their value is generally in the order named: Pink, lavender, white, and blue. While our list of the 12 Best Varieties we feel should be largely depended upon, other varieties find favor, explaining the need of an extended list.

IN SOWING SEED

Three years ago we introduced the treatment of seed with Cuprocide or red oxide to protect it from rotting after sowing. This has proved generally successful, clearly demonstrating that when Pea seed rots after sowing it does not at all prove it old or dead. When greenhouse soil is protected from the cleansing effect of outdoor elements, rot accumulates, explaining why seed sometimes rots or seedlings damp off. If clean soil and our Cuprocide treated seed are used, little rot will develop. Another precaution, especially in hot weather, is avoid sowing in or maintaining soil wet. Sow in fairly moist soil and don't add a drop of water until after seedlings are up. This procedure is necessary with white-seeded varieties and should be used with black-seeded kinds as well.

***Daphne.** (New.) Soft salmon-pink on cream ground. Rather light, but quite pleasing color, and unusual for stem and flower size. See cut preceding page.
½ oz., 30c; 1 oz., 50c; 4 ozs., \$1.75; 1 lb., \$6.50.

***Tahoe.** (New.) Fine dark blue, some deeper than Hoover. Well-formed flower on good stem, and free producing.
½ oz., 30c; 1 oz., 50c; 4 ozs., \$1.75; 1 lb., \$6.50.

Bacchus. (New.) Rich deep maroon-purple. Fine large flower and an outstanding color for certain classes of work.
½ oz., 30c; 1 oz., 50c; 4 ozs., \$1.75; 1 lb., \$6.50.

OUR COMPLETE LIST EXCEPT "THE 12 BEST" FOUND ON PRECEDING PAGE

Starred (*) varieties are our choice of preferred cut flower kinds.

American Beauty. American Beauty rose; large flower and extra stem.

Amethyst. Rich bright purple.

Annie Laurie. Bright rose-pink; medium size flower.

***Apollo.** Salmon-cerise with long stem; fine for spring.

Attraction. Rich salmon-rose, long-stemmed.

Aurora. Orange-scarlet striped; novelty color.

Ball Blue.

Ball Orange.

Ball Rose Queen. Large flowered, strong growing rose-pink.

Blue Bird. Prefer Mrs. Hoover.

Bright Light. Vivid orange-scarlet.

Chevalier. Dark rose.

Columbo. Rose and white bicolor.

***Eileen.** Rich Begonia rose.

Eleonor Blue. Nice light blue, for spring-flowering only.

Flamingo. Orange-salmon; long-stemmed.

Frogrance. Fine lavender but not early as Harmony.

Giant Rose. Well named but not long-stemmed.

Grenadier. Poppy-scarlet. Rather heavy shade.

Horlequin. Bicolor chocolate; attractive novelty.

***Heather Bell.** Rosy lavender; medium size, but free flowering.

***Hape.** Fine white; not as pure a color as white-seeded kinds, but less subject to rot in germination.

Indigo Blue. Dark shade of clear blue.

***Jeonne Mamitsch.** Clear rose, long stems.

***Josie.** Longest stemmed clear rose-pink. Extra strong growing and good producer but stems not heavy.

Lovondo. Lavender.

Moroon Prince. Dark maroon, rather heavy.

Michigan. Large lavender.

***Mrs. Holscher.** Very good rose-pink.

Mrs. Kerr. Salmon.

Oriental. Black-seeded cream.

***Pride.** Extra long-stemmed brilliant cerise.

Prosperity. Soft growing rose-cream.

Red Bird. Crimson-red.

Snowstorm. White-seeded white; medium size.

Springsong. Prefer Boon.

***Success.** Extra bright deep rose-pink.

***Sunroy.** Light cerise, fine long stem.

Susanna. Carmine-red.

***Top Hat.** (New.) Deep bright violet-blue; fine growth. Improves Indigo Blue for stronger color.

Vogue. Light bluish lavender.

Vulcon. Prefer early Bright Light.

***White Harmony.** Longest stemmed, black-seeded white.

Zvolonek's Rose. Laddie is much better.

Any above priced at: ½ oz., 20c; 1 oz., 30c; 4 ozs., \$1.00; 1 lb., \$3.50.

Boll Early Mixture. A formula mixture of above colors; good standard varieties. ½ oz., 15c; 1 oz., 25c; 4 ozs., 85c; 1 lb., \$3.25.

LATE or SUMMER PEAS

In many sections, particularly south of the Ohio River, the late class is sown outdoors late in fall. In well-drained soil and with some covering they winter over and have a fine start for a June crop. This class is also sometimes sown with indoor Earlies started late or after Mums. The Lates do not climb up with the Earlies, branching freely until the Earlies begin to give out after which the Lates take their place.

***Ambition.** Fine deep rosy lavender.

***Ascot.** Medium light clear pink; excellent.

Austin Frederick Improved. Large rosy lavender.

Avolanche. Fine white-seeded white.

***Beotall.** Sparkling pink suffused salmon.

***Begonia Rose.** (New.) Rich even Begonia Rose. Large ruffled flowers and excellent growth.

Blanche Ferry. Rose and white bicolor.

Blue Bird. Good clear blue.

***Blue Flame.** Deep bright blue.

***Bonny Briar.** Excellent, long-stemmed rose-pink for cutting.

Campfire. Deep sun-proof scarlet.

Chieftain. Rich satiny mauve-blue.

***Chinese Blue.** A solid bright color with heavy growth; the best late blue.

Commander Godsall. Deep violet-blue.

Constance Hinton. Black-seeded white.

Crimson King. Fine sun-proof crimson.

Debutante. Soft salmon shaded peach-pink.

Doreen. Large rich carmine.

Elfrida Pearson. Clear light pink.

Fiancee. Attractive salmon-pink.

Fluffy Ruffles. Soft cream-pink.

Giant White. Pure white.

***Gigantic.** Finest black-seeded white; many duplexed.

Gleneagles. Clear even lavender.

Hawmark Lavender. Light lavender.

***Headlight.** Fine sun-proof orange-scarlet.

Heavenly Blue. Good Delphinium-blue.

Hebe. Large rose-pink.

Hercules. Standard deep rose-pink.

Hera. Cerise; prefer Headlight.

***Highlander.** (New.) Finest large, long-stemmed lavender.

Lody Ruffles. Large ruffled soft pink.

Loveliness. Silvery pink on cream.

Magnet. Improved Miss California.

Mory Pickford. Fine cream-salmon-pink.

Mastercream. Extra strong, large, black-seeded cream.

Matchless. Deep cream.

Movis. Prefer Headlight.

Miss California. Large salmon-rose.

Model. Good white.

Olympia. Deep purple.

***Pinkie.** Excellent rose-pink for market; fine heavy growth.

***Pinnacle.** Deeper rose than Pinkie; good.

***Powerscourt.** Fine lavender.

Royal Purple. Large rich purple.

Royal Scot. Sun-proof orange-scarlet.

Springtime. Nice light clear rose.

Supreme. Soft delicate pink.

The Clown. Crimson and white.

Warrior. Deep bronze-maroon.

***Welcome.** Deep brilliant sun-proof scarlet.

Prices on all above standard varieties: 1 oz., 20c; 4 ozs., 60c; 1 lb., \$1.75.

Ball Florists' Mixture of above: 1 oz., 15c; 4 ozs., 50c; 1 lb., \$1.25; 5 lbs., \$5.00.

GREENHOUSE SNAPDRAGONS

With free ventilation and plenty of sunshine, such as we get during the spring months, Snapdragons reach their highest state of development in northern greenhouses—none to compare with them in California or England. But during the depth of winter when vents are frozen shut and the sun is eclipsed more or less for weeks, our Snapdragons get into trouble. The planning of another season's crop is a good time to think of this.

Snapdragons distinctly do not like a deep wet soil. We have noted them thriving in a crack of a stone wall, and in other little nourished out-of-the-way places, which at least proves that they are not native to swamps, and that is about what a ground bed during midwinter might become if watering and drainage are not carefully thought out. While the early winter crop can be well grown on deep ground beds, they are more safely and better produced in a 6-inch raised bed in which the soil might settle down to a depth of 4 inches. Start them off in fresh soil, though we find that if thoroughly saturated with hot water it will be all right. But something should be done to destroy the harmful life that accumulates in sheltered greenhouse soil. If fresh, add one-quarter well-rotted manure to it and about 100 pounds of bone meal to each 1000 square feet of bench. We use little or no further fertilizers until the stronger sun of February permits plenty of ventilation and invigorates the growth so it can use additional fertility without the spikes dropping part of their buds or cracking off, or other forms of midwinter trouble developing. In the Central States rust develops little or not at all until the heat of late spring sets in. But it sometimes becomes serious where fogs prevail, especially along the seaboard states. The only preventative measure is maintaining atmosphere dry as possible by watering early on bright days when ventilation will dry the atmosphere before night. Our experience is that any spray for rust is worse than a waste of time and material. Such preventative measures as the use of raised beds, maintaining dry, well-ventilated atmosphere, and avoiding over-feeding, especially during the depth of winter, will develop a firm vigorous growth. Such measures will do more to resist midwinter trouble than anything that can be done after it sets in.

GREENHOUSE GROWN SEED

When grown in the open field, unless widely segregated, Snapdragons cross or mix more or less—this cannot be avoided. Even when greenhouse grown, some breaks will appear because of the inherent tendency of all Snaps to change. The lavenders, Bertha Baur and Orchid, are much inclined to vary. But the chances of getting off colors are greater when grown in the open where they are fully exposed to the crossing effect of wind and insects. Seed of all forcing varieties we offer is greenhouse grown—all of it in our own houses, except originator's novelties.

THE 12 BEST VARIETIES

This season we are offering a list of the best varieties, in response to numerous requests for it. Three new ones are included that we have confidence in, notably Glorious, that you will find a striking and original color. Also in Marie Louise we have a new color. Some consider this rather light, but it has pleased all who have used it. Of last year's new ones, Windmillers' Cheviot and White Wonder speak for themselves. We realize, of course, that varying conditions, treatment, and market makes it difficult to suggest the best varieties, but we wish to add that the following are selected according to our experience and the general demand for them.

Glorious. (New—H. R. Frank & Sons, Columbia City, Ind.) May be described as a dark or glorified Afterglow. The reddish bronze contrasts very richly with the yellow center of the flowers. We find it a strikingly attractive color for flowering at any season. Growth and flowering habit similar to Afterglow and Rose Queen. Comes practically 100 per cent true to color.
½ tr. pkt., \$1.25; tr. pkt., \$2.00; 3 tr. pkts., \$5.00.

The experience of a Chicago commission house in selling the flowers the past few seasons will be of interest and is as follows:

"I heartily endorse the new Frank Snap, Glorious, having sold it for several years to our retail trade, that finds its reddish copper color a highly attractive and an original one."

Joseph Foerster Co. per Leonard C. Koehler, Mgr.

Marie Louise. (New—Raasch, Hoopston, Ill.) This variety gives us an entirely new color in winter Snaps. The color can be described as a beautiful seashell-pink. The color effect is light, a shade that will at times be used to excellent advantage. Marie Louise comes practically 100 per cent true to its color and is uniform in habit. Tr. pkt., \$2.00; 3 pkts., \$5.00.

White Wonder. Clear snow-white—no shading—together with ideal flowering habit, fairly early and continuous. We consider it, without reservation, the best white. Tr. pkt., \$2.00.

Cheviot Maid Supreme. The most dependable and popular clear rose-pink. Fairly early and continuous flowering. Tr. pkt., \$1.00; 3 pkts., \$2.50; 5 pkts., \$3.50; 7 pkts., \$4.55.

Cheviot Supreme, Windmillers Strain. Individual flowers are larger than the original strain with fewer on the stem. General effect is more attractive and we believe will be preferred. ½ tr. pkt., \$1.00; tr. pkt., \$1.50.

New Cincinnati. The finest fairly light rose-pink, long-stemmed, and our stock is true to color and habit. Tr. pkt., \$1.00; 3 pkts., \$2.50; 5 pkts., \$3.50; 7 pkts., \$4.55.

Rose Queen. The standard fairly dark rose-pink. Tr. pkt., \$1.00; 3 pkts., \$2.50; 5 pkts., \$3.50; 7 pkts., \$4.55.

Afterglow. Fine golden orange. Some growers find the flower heads snap easily. This is largely overcome by avoiding excess moisture and soil fertility.

Tr. pkt., \$1.00; 3 pkts., \$2.50; 5 pkts., \$3.50; 7 pkts., \$4.55.

Miss Wooster. Early flowering, light golden bronze. We find it clearly best in this color class.

Tr. pkt., \$1.50; 3 pkts., \$4.00; 5 pkts., \$6.50.

Ceylon Court—Dark Selection. Early, free, and continuous flowering continues to leave this fairly light yellow at the head of its color class.

Tr. pkt., \$1.00; 3 pkts., \$2.50; 5 pkts., \$3.50; 7 pkts., \$4.55.

Coates' Yellow Perfection. Golden yellow, better color than Ceylon Court and longer stemmed, but later flowering and not so free. Should not be planted on deep beds for winter flowering.

Tr. pkt., \$1.00; 3 pkts., \$2.50; 5 pkts., \$3.50; 7 pkts., \$4.55.

Velvet Beauty. Deep crimson-red. We have selected our strain of this away from the cold crimson-rose of the original stock to one that is best described as a crimson-scarlet; an indispensable color in limited quantities.

Tr. pkt., \$1.00; 3 pkts., \$2.50; 5 pkts., \$3.50; 7 pkts., \$4.55.



WINTER SNAPDRAGONS

COMPLETE LIST EXCEPT THE 12 BEST

Special Offer: 7 pkts. of any \$1.00 varieties for \$4.55.

Tr. pkt. 3pkts. 5pkts.

Bertha Baur. Standard lavender; some rogue colors	\$1.00	\$2.50	\$3.50
* Bronze Queen. (New.) Medium light bronze	2.00	5.00	
* Coptor. Pure white, fair habit	1.50	4.00	6.50
Celestial. Light yellow; long-stemmed.	1.50	4.00	6.50
Ceylon Court. Good standard yellow	1.00	2.50	3.50
Cheviot Maid, White. Fair size flower	1.00	2.50	3.50
Cheviot Maid, Yellow. Good stem, medium size flower	1.00	2.50	3.50
* Daybreak. “Briarcliff” shade of pink.	1.00	2.50	3.50
Gilbert’s Pink Supreme Queen. (New.) Shade of Rose Queen	2.00		
Kirkwood Beauty. Bronzy orange	1.00	2.50	3.50
La France. La France shade of pink; varies	2.00	5.00	
Lucky Strike. Strong growing white.	1.00	2.50	3.50
Marion. Good early habit; fairly clear white	1.50	4.00	6.50
	Tr. pkt.	3pkts.	5pkts.
New Deal. Extra early bronze; prefer Sunlite	\$1.00	\$2.50	\$3.50
Orchid. (Schrock’s.) Varies some in color but the best orchid-lavender available	2.00	5.00	
* Peggy Schumann. Medium deep pink; ex- cellent clear habit	2.00	5.00	
Radiance. Large flowered pink	1.00	2.50	3.50
* Sunlite. Extra early golden bronze; best used for midwinter flowering	1.00	2.50	3.50
Sun Tan. Early flowering orange-tan	1.00	2.50	3.50
Terry’s Surprise. (Improved.) Rose-shaded orange; fine for spring	1.00	2.50	3.50
Westover’s Fringed White. Extra large, fringed, pure white; medium early habit	2.50	6.50	
White Prosperity. Clear white	1.50	4.00	6.50
White Rock. White; flowers poorly spaced	.50	1.25	
Winter Helen. Improved Helen	1.00	2.50	3.50
Ball Fencing Mixture. Made up by us of the best standard colors, fully half being Rose Queen and Cheviot Maid Supreme. We mix this thoroughly as possible	.75		

½ tr. pkts. of the following varieties supplied at 60c each:
Afterglow, Ceylon Court, Cheviot Maid Supreme, Coates’ Yel-
low, Lucky Strike, Rose Queen, Miss Wooster, and Velvet
Beauty.

RUST-RESISTANT VARIETIES

(Not Winter Flowering)

Following are the best resistant varieties but they are not re-
sistant under all conditions due to the many varieties of rust.
However, we strongly recommend the following, finding all highly
resistant under our conditions.

	Tr. pkt.	½ oz.	¼ oz.	1 oz.
Buttercup. Fine true butter yellow for cutting	\$0.25	\$0.45	\$0.80	\$3.00
* Canary Bird. Long-stemmed deep yellow	.30	.75	1.25	4.00
Dainty. Attractive cream-pink; dwarf and large flowered	.35	.85	1.50	5.00
Defiance. Long-stemmed, attractive shade of red	.25	.45	.80	3.00
Fair Lady. Light pink shades; long- stemmed	.25	.45	.80	3.00
Golden Orange. Nice compact habit.	.30	.75	1.25	4.00
Indian Girl. Dwarf crimson shades.	.25	.45	.80	3.00
* Maximum White. Fine long-stem- med white; true	.30	.75	1.25	4.00



Such a bunch of Frank Volz Cheviot Maid Supreme would show a profit
anywhere. It was sown July 5th and photographed December 12th.

	Tr. pkt.	½ oz.	¼ oz.	1 oz.
* Opal Queen. Interesting shades of salmon and apricot; long-stemmed.	\$0.40	\$1.00	\$1.75	\$6.00
Orange Pink. About Sun Tan shade; compact for bedding	.30	.75	1.25	4.00
Wallflower Red. Long-stemmed	.25	.45	.80	3.00
Wildfire. Bright reddish bronze with yellow; true and dwarf	.25	.45	.80	3.00
* University of California Mixture. A carefully blended mixture of long-stemmed cut flower varieties.	.20		.50	1.75
* Ball Rust-Resistant Mixture. Very bright mixture; medium dwarf	.20		.50	1.75

STANDARD OUTDOOR VARIETIES

(Non-resistant except where noted)

The following are much used, especially the Maximums, for cut-
ting. The more dwarf-growing Majestics are fine for bedding
where summers are not excessively hot.

MAXIMUM. Long-stemmed; fine for cut flowers.

Appleblossom. Rose-pink, white throat.

***Canary Bird.** (Rust-resistant.) Canary-yellow.

Cattleya. Orchid-lavender.

Copper King.

Orchid. Bright lavender.

***Ruby.** Rich velvety red.

***Snowflake.** White, slight yellow lip.

The Rose. Deep rose-pink.

Mixture. (Rust-resistant). All above colors.

Above priced at: Tr. pkt., 15c; ¼ oz., 35c; 1 oz., \$1.25.

MAJUS GRANDIFLORUM. Large flowered, fairly tall. Good for
cutting.

***Engrade.** Coral-pink and amber; fine.

Harmony. Terra-cotta-rose; shading yellow.

***Apricot Beauty.** Choice apricot-pink with extra large flower
and heavy spike. Quite true to color.

Each: tr. pkt., 15c; ¼ oz., 35c.

MAJESTIC. Extra large flowered and fairly compact; fine for
bedding.

***Evensang.** Large flowered buff-pink.

Fair Lady. Extra large light rose-pink.

***Golden Dawn.** Bright golden orange.

Orange King. About an Afterglow shade.

***Rose Beauty.** Rich rose-pink.

***Twilight.** Deep golden buff shade.

Mixture. Of all colors in this class.

Each: Tr. pkt., 50c; ½ oz., 80c; ¼ oz., \$1.40.

Excess moisture and fertility, with cloudy weather, cause most rot and snapping of spikes in Snaps.

ANNUAL LARKSPUR

(8,500 seeds per ounce)

A midsummer sowing of this seed is frequently a failure for two reasons: The seed is nearly a year old at that time; and even when freshly harvested, it frequently does not germinate at all well in a high temperature. The principal reason for this is that Larkspur is very much a cool temperature crop; in fact, it is a half or three-quarters hardy annual. For this reason, a sowing made in midsummer meets with conditions very much against its nature. If sown outdoors late in June where summers are hot, it frequently will remain dormant in the soil until the rains and lower temperatures of September set in. So, better not plan to sow this seed until the higher temperatures are over—early September with us. But if midsummer sowing must be done, store the seed in a refrigerator for a few weeks and sow during a cool period. Sometimes this brings it on all right.

If fall-sown seedlings get well established, they will usually winter over as far north as Cincinnati or Philadelphia. Such a start is quite an advantage over an outdoor spring sowing or planting out of seedlings or pot plants. In more northerly sections, fall sowing should not be done early enough to permit the seed to germinate. Also, we find it advisable to cover such a sowing with any loose material that will prevent washing out of the seed by heavy rains. Under all conditions perfect drainage is necessary for Larkspur. Base branching varieties can be cut with somewhat longer stems and should be preferred for this reason.

All Larkspur seed orders received during July and August will be filled from our supply of tested year-old seed. New crop seed is usually ready about September 1st.

We have a number of new varieties of Larkspur on trial but they will not flower until this catalog is ready for the press. Should any be found superior to standard varieties, they will be offered through our trade paper advertisements.

Base-Branching or Imperial Varieties

- ***Blue Bell.** Clear mid-blue; excellent.
- Blue Spire.** Rather deep violet-blue.
- Carminé King.** Carmine-rose.
- ***Daintiness.** Lighter lavender-blue.
- Exquisite Pink Improved.** Rich soft pink.
- ***Gloria Improved.** Bright rose-pink; stronger color and longer stem than either Rosamond or regular Gloria.
- ***Lilac Queen.** Rich lilac-lavender.
- Los Angeles Improved.** Nice salmon-rose.
- ***Miss California.** Pink shaded salmon.
- ***White King.** Finest white; large flowered, and whiter than White Spire. Also somewhat earlier.
- White Spire.** Good white.

Prices on all above varieties: Tr. pkt., 25c; ¼ oz., 35c; ½ oz., 60c; 1 oz., \$1.00; 1 lb., \$10.00.

Mixture. Specially blended mixture of above.

Tr. pkt., 20c; ¼ oz., 30c; ½ oz., 50c; 1 oz., 80c; 1 lb., \$8.00.

STOCK-FLOWERED VARIETIES

- Dark Blue.** A rather heavy color.
- Empress Rose.** An excellent pink.
- La France.** Salmon-pink.
- ***Lilac.** Pleasing shade of deep lilac.
- ***Los Angeles.** Salmon-rose.
- ***Rosamond.** Deep rose; excellent.
- ***Rose Queen.** Very attractive rose-pink.
- Sky Blue.** Good light blue.
- White.** Prefer White King.

Prices on all above varieties: Tr. pkt., 20c; ½ oz., 30c; 1 oz., 50c; 1 lb., \$5.00.

Mixture. Formula mixture of above.

Tr. pkt., 15c; 1 oz., 30c; 1 lb., \$3.50.



Showing why the new Imperial or Base-Branching varieties are preferred for long-stemmed cutting.

GIANT HYACINTH-FLOWERED

Produces one long, non-branching spike. Seed germination is more uncertain than is that of the branching class.

Dark Blue	Lilac	*Pink	*Purple	White
Each: Tr. pkt., 25c; ¼ oz., 30c; ½ oz., 50c; 1 oz., 80c; 1 lb., \$8.00.				

Mixture: Tr. pkt., 15c; ½ oz., 35c; 1 oz., 60c; 1 lb., \$6.00.

DWARF EMPEROR TYPE

This class grows less than half the height of the above cut flower kinds and is used for bedding or border work.

Ageratum Blue. Well named and pleasing.

Tr. pkt., 25c; ½ oz., 40c; 1 oz., 75c.

Enchantress. Soft salmon-pink. Choice.

Tr. pkt., 35c; ½ oz., 70c; 1 oz., \$1.35.

FLORISTS' PANSIES

(25,000 seeds per ounce)

The advertising value of a bed of Pansies in flower is attested to by any retailer who has had them. Also, of course, the Pansy plant business is a considerable one and shouldn't be overlooked, especially if the newer richly colored Giant varieties are used. Although in limited demand on wholesale markets, Pansies as cut flowers find considerable sale for the retail grower. Any of the long-stemmed Giant Mixtures, and especially the new Don Strain, work out very well for cutting. Seed should be sown in July or August and the plants set out after early or midseason 'Mums. Pansies respond readily to electric light forcing that will bring them in full crop in late winter.

Seed germination is most important; be sure to sow seed in a cool location (a July or August sowing can well go outdoors in a shaded spot), and watch moisture conditions of the surface carefully. A 100-degree temperature combined with a muddy or dry, caked soil will destroy any lot of Pansy seed.

We annually devote the 150-foot bed shown at right to trials of all varieties and from all dependable sources. Those who depend upon us for seed are, of course, directly benefited by this up-to-the-minute information on varieties and strains.

New Seed will be ready not later than mid-August. Unless specifically marked for new seed, all orders received up to that time will be filled with our last season's crop that has been stored in a 40-degree temperature and germinates well above 60 per cent.

BALL GIANT MIXTURE

This is the finest all-purpose mixture on our list. It combines rich coloring, size, texture, and stems to a degree that makes it outstanding for either cutting or bedding. See Novelty List, page 3, for further description. Tr. pkt., 40c; 1/4 oz., \$3.00; 1 oz., \$5.50; 4 ozs., \$20.00.

Ball Giant Mixture Dwarf Strain. Differs from our regular Ball Giant Mixture only in being more compact in growth. Uniformly dwarf, and is especially recommended for bedding.

Tr. pkt., 50c; 1/4 oz., \$2.00; 1/2 oz., \$3.50; 1 oz., \$6.00; 4 ozs., \$21.00.

Englemann's Giant Mixture. A fine mixture of real Giants. We prefer it to Maple Leaf Giants because of a much better color range, particularly in blues. Originator's (Carl Englemann) seed. Tr. pkt., 50c; 1/4 oz., \$2.50; 1/2 oz., \$4.50; 1 oz., \$8.00.

Englemann's Special. Dwarf, compact, 5-blotched strain excellent for bedding.

Tr. pkt., 50c; 1/4 oz., \$2.50; 1/2 oz., \$4.50; 1 oz., \$8.00.

Maple Leaf Giants. One of the well known extra large flowering Giant Pansy Mixtures, quite long stemmed and of extra heavy growth. The colors are not so rich nor original as in most other giant mixtures.

Tr. pkt., 50c; 1/4 oz., \$2.00; 1/2 oz., \$3.50; 1 oz., \$6.50.

Steele's Jumbo Mixture. Extra large flowered Giant, heavy, strong growth, and long stemmed with an attractive array of colors. Our supply of seed comes direct from Mr. Steele, the originator, of Portland, Oregon.

Tr. pkt., 75c; 1/8 oz., \$1.75; 1/4 oz., \$3.25; 1/2 oz., \$6.25; 1 oz., \$12.00.

Raggli Giant Mixture. A high class and well known strain of rich colors and fine size. Well suited for either bedding or cut flower purposes.

Tr. pkt., 50c; 1/4 oz., \$1.50; 1/2 oz., \$2.50; 1 oz., \$4.50; 4 ozs., \$15.00.

Improved Swiss Giants. Choice in coloring and excellent for size and stem.

Tr. pkt., 50c; 1/4 oz., \$1.75; 1/2 oz., \$3.25; 1 oz., \$6.00; 4 ozs., \$20.00.

Orchid Flowered. (New.) Our trials showed this an attractively frilled petaled strain. Large flowered and containing pleasing pastel shades of orchid, mauve, primrose, and apricot.

Tr. pkt., 75c; 1/8 oz., \$1.75.

Donovan's Strain. A fairly large flowered, attractively colored mixture much used for bedding purposes, especially because of its early flowering habit. Tr. pkt., 50c; 1/4 oz., \$1.40; 1 oz., \$5.00.

Dan Pansy. (Ball Strain.) An extra-long-stemmed, upright growing strain, particularly suited to greenhouse forcing. We have improved this strain through selection. It is distinctly superior in length of stem to the original, but it continues to lack striking colors. See Novelty List for further description. Available end of August. Liberal 1/2 tr. pkt., \$1.00; tr. pkt., \$2.00.

No Super Strains. The increased excellence of our Maple Leaf Giants and Improved Swiss Giants strains leaves no room for Super strains.

Our Pansy trials clearly show our Ball Giant Mixture the best all-round strain.



The visitors shown above are inspecting our extensive annual Pansy trials. All fine strains available are lined up here for comparison.

Swiss Giants in Separate Colors

Coronation Gold. (New.) Our trials show this the best large golden yellow. A very good percentage produces self-colored golden yellow flowers without penciling. Received 1937 Award of Merit in All-America Trials.

Tr. pkt., \$1.00; 1/8 oz., \$1.50; 1/4 oz., \$2.75.

Fire Beacon. Very unusual shade, bright wallflower-red with touch of orange; similar in effect to Wallflower, Fire King.

Tr. pkt., 50c; 1/4 oz., \$2.25; 1 oz., \$8.00.

Alpenglow. Rich garnet-red; an effective color for bedding.

Tr. pkt., 50c; 1/4 oz., \$1.75; 1/2 oz., \$3.25; 1 oz., \$6.00.

Rheingold. Large yellow with brown blotch in center.

Tr. pkt., 50c; 1/4 oz., \$1.75; 1/2 oz., \$3.25; 1 oz., \$6.00.

Lake of Thun. Rich, fairly deep blue with dark center; the finest blue.

Tr. pkt., 50c; 1/4 oz., \$1.50; 1/2 oz., \$2.75; 1 oz., \$5.00.

Mont Blanc. The finest white Swiss Giant, with little marking.

Tr. pkt., 50c; 1/8 oz., \$1.00; 1/4 oz., \$1.75; 1 oz., \$7.00.

Smaller Flowered Bedding Varieties

Come quite true and are of compact growth.

Golden Queen. Clear yellow with some marking.

Lord Beaconsfield. A standard blue for bedding.

Snow Queen. Clear paper-white with some markings.

Each: Tr. pkt., 25c; 1/4 oz., 45c; 1 oz., \$1.50.

VIOLA CORNUTA (24,000 seeds per ounce)

Miniature Pansies. As easily grown as Pansies, and they call for the same cultural treatment. Particularly adapted to bedding because of their dwarf, free-flowering habit. Descriptions are from our greenhouse trials. Varieties starred (*) are especially recommended.

Apricot. Choice, early, fairly deep apricot.

Tr. pkt., 35c; 1/4 oz., 85c; 1 oz., \$3.15.

***Arkwright Ruby.** Deep crimson-scarlet. Long-stemmed.

Tr. pkt., 35c; 1/8 oz., \$1.00; 1/4 oz., \$1.75; 1 oz., \$6.00.

Black Prince. Deep violet-blue; not dwarf.

Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$2.75.

***Chantreyland.** Similar to, but improves Apricot for size of flowers and evenness. Tr. pkt., 35c; 1/4 oz., \$1.25; 1 oz., \$4.00.

G. Wermig. Violet-blue; somewhat late flowering.

Tr. pkt., 50c; 1/8 oz., 85c; 1/4 oz., \$1.60; 1 oz., \$6.00.

***Jersey Gem.** Rich dark blue; 90 to 95 per cent true to color. Somewhat late flowering. Tr. pkt., 50c; 1/8 oz., \$1.75; 1/4 oz., \$3.25.

Lutea Splendens. Choice golden yellow.

Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.75.

Mauve Queen. Light lavender-blue; very true to color.

Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.75.

***Papilio.** Light blue with white; extra early and free flowering. Quite effective and true to color. Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.75.

***Puck.** Upper petals violet, lower yellow. An effective contrast.

Tr. pkt., 25c; 1/4 oz., 60c; 1 oz., \$2.25.

White Perfection. A clear paper-white.

Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.75.

***W. H. Woodgate.** Bright violet; large and long-stemmed.

Tr. pkt., 50c; 1/16 oz., \$1.75; 1/8 oz., \$3.25.

Large Flowered Mixture. Carefully balanced mixture of above.

Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.75.

CYCLAMEN - Binnewies Strain

We Supply Originator's Seed Only



Cyclamen growing is a specialized job. Special conditions of moisture, temperature, and soil must be closely watched or the 16-18 month's time required to mature a plant will be wasted. Our Ball Red Book devotes a chapter to Cyclamen growing, written by John Vogt, a successful Cyclamen specialist.

	100	1000	5000
No. 1—Dork Blood-Red	\$1.15	\$10.00	\$46.00
No. 2—Bright Red	1.15	10.00	46.00
No. 3—Pure Rose	1.15	10.00	46.00
No. 4—Soft Rose. Carmine eye. Improved Rose of Marienthal	1.15	10.00	46.00
No. 5—White. Carmine eye	1.15	10.00	46.00
No. 6—Pure White	1.15	10.00	46.00
No. 7—Bonfire. Brilliant salmon	1.70	15.00	69.00
No. 8—Solmon-Scarlet. America Improved	2.00	16.00	73.00
No. 9—New Solmon-Rose Improved	1.50	13.00	59.00
No. 10—Glory of Wandsbek or Perle of Zehlendorf. Dark salmon	1.50	12.00	55.00
No. 11—Rose of Zehlendorf. Light salmon	1.50	12.00	55.00
No. 12—Oronge Beauty. Orange-vermilion	1.80	17.00	78.00
No. 14—Morning Red	1.60	13.00	60.00
No. 15—Soffron-Red	1.40	11.00	50.00
No. 16—Soffron-Red. Silver edged	1.70	15.00	69.00
No. 17—Strioto. Mixed varieties	1.40	11.00	50.00
No. 18—Mozort. Deep pink	1.80	17.00	78.00
No. 19—Lavender	1.15	10.00	46.00
No. 20—New Ruffled in Colors. Especially attractive class	2.00	18.50	86.00
No. 21—Pink Pearl. Salmon-pink	1.80	17.00	78.00
Cristoto. Pure white feathered	1.60	13.00	60.00
Mixture of above colors	1.15	10.00	46.00

VOGT'S DOUBLE CYCLAMEN



We know from observation that when two equally well-flowered plants are put up for the judgment of the average buyer, the double-flowered strain will usually be favored.

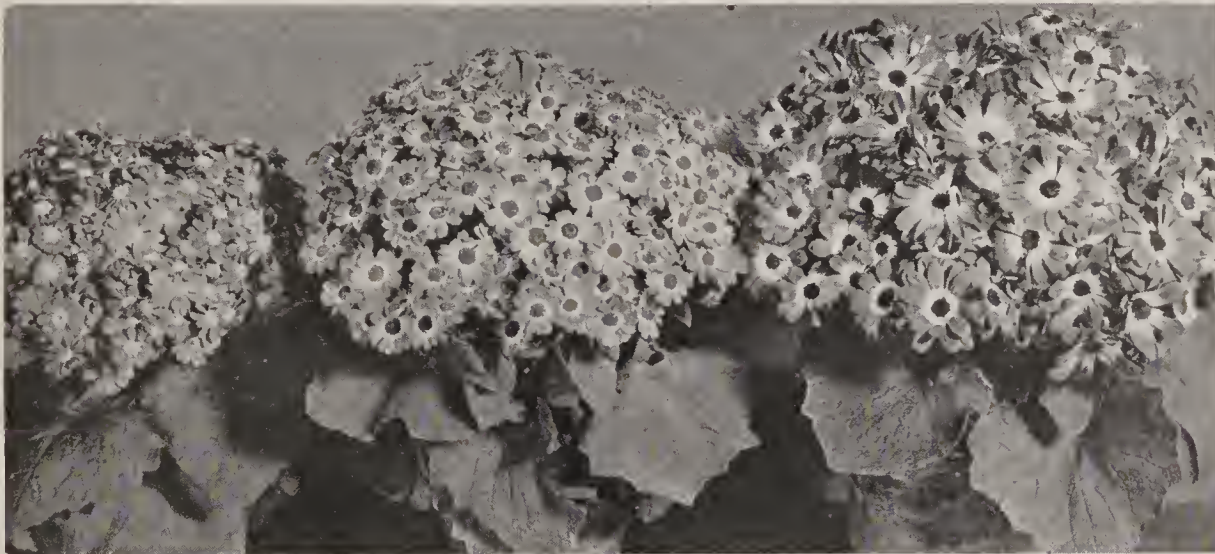
The double or duplexed flowers occasionally noted in Cyclamen produce a fuller and more showy effect than the regular singles and are generally preferred. John W. Vogt, of Sturgis, Michigan, has been developing this duplexed habit for many years, firmly believing that future improvements will be along these lines. We believe he is right. At present his strains run to 10- and 12-petaled flowers, and this number is increasing annually. A varying percentage will come normal or partly duplexed, but this number is becoming less with every generation of seed produced. We handle the originator's seed only.

	100	250	500	1000
Cerise Brilliant. Rich cerise-red ..	\$2.50	\$5.75	\$10.75	\$20.00
Prosperity. Flaming rich rose ...	2.50	5.75	10.75	20.00
Admiration. Salmon-rose with shaded eye	2.50	5.75	10.75	20.00
Roseo. Soft rose shading with light at tips of petals	2.50	5.75	10.75	20.00
Mixture of above four colors	2.50	5.75	10.75	20.00

THE BEST CINERARIAS

While the demand will vary some in different sections, it can be safely stated that nearly everywhere the strains producing large well-rounded heads of small or medium size flowers are preferred. Cremer's strain for the small-flowered and Berlin Market for the medium size exactly fill this demand. The past season we noted an increasing call for the Berlin Market Weissensee strain. This is due to the predominating white eyes this strain is bred for. This eye adds a distinct attractiveness to the color—an important point. However, Cremer's produces somewhat smaller foliage, an important consideration, too. Our suggestion is that some of each should be grown, perhaps favoring Cremer's.

A late June sowing can be flowered in 5's for Christmas, while an August 15th start usually should be at best for Easter if grown cool, say around 45 degrees. All our Cineraria trials are sown October 1st and flowered in 4's for Mother's Day. Avoid holding Cinerarias too wet. This clearly encourages rotting of roots, that reacts with a stunted effect, preventing that full rounded development that is necessary in a fine Cineraria.



Above pictures the habit of three most popular strains. Dwarf one is Multiflora Nana. Center, the ever-popular Cremer's. Right, Berlin Market. First prize at all shows is usually divided between the last two.

Stars (*) indicate preferred varieties.

***Cremer's Prize Mixture.** 155,000 s. Medium to small flowers freely produced in extra large heads and in a well-balanced mixture of colors. Semi-dwarf habit and with smaller foliage than most other strains, also some earlier flowering. Small flowers in most any class of plants are usually harder and will hold up longer than large-flowered varieties. This point favors the Cremer strain.

Tr. pkt., \$1.50; 1/64 oz., \$2.25; 1/32 oz., \$4.00; 1/16 oz., \$7.50.

***Berlin Market.** (Weissensee Strain). 110,000 s. While the demand for this variety is second, it is clearly the most attractive of the mixtures, for it contains practically all light-centered flowers and generally brighter colors than Cremer's. Also, the larger flowers are more attractive. A very excellent strain. See Novelty List, page 2, for further description.

Tr. pkt., \$1.00; 1/64 oz., \$1.60; 1/32 oz., \$2.75..

Cremer and Berlin Market Mixed. For the grower who wants a limited amount of both strains, we offer this mixture that consists of one-third Berlin Market and two-thirds Cremer's.

Tr. pkt., \$1.00; 1/64 oz., \$2.00.

BERLIN MARKET, SEPARATE COLORS: **Dark Crimsan** and **Dark Blue** are the outstanding separate colors. They can be depended upon to come about 90 per cent true to these colors. Each: Tr. pkt., \$1.00; 1/64 oz., \$1.60.

***Multiflora Nana Mixed.** 155,000 s. Considerable demand for this class because of its extra dwarf habit. Nice to sow late and flower in 4-inch pots for Mother's Day. In a 5-inch pot they seem almost out of proportion to their height. Small flowered and dwarf habit is uniform. Tr. pkt., \$1.00; 1/32 oz., \$2.00.

MULTIFLORA NANA TYPE in Dark Crimson and Dark Blue.

The two best separate colors. Come fully 90 per cent true to these attractive colors. Each: Tr. pkt., \$1.00; 1/64 oz., \$2.00.

***Multiflora Nana, "Gold Center"**. A selection of this dwarf strain with anthers in disc of flower more prominently golden yellow, distinctly adding to its attractiveness. Comes around 60-75 per cent true to this character.

600 seeds, 60c; tr. pkt., (1000 seeds), \$1.00.

HYBRIDA GRANDIFLORA; SEPARATE COLORS: **Azure-Blue**; a rich red known as **Kermesina**; and **Sanguinea**, strong blood-red grandiflora. A German variety that we found a richer and more attractive color than Matador, and a new color in Cinerarias. Each: Tr. pkt., 75c; 1/64 oz., \$2.00.

Hybrida Gigantea. Dark red with white eye. An outstanding color combination. Medium size flowers, compact growth.

Tr. pkt., \$1.00; 1/64 oz., \$2.25.

Giant Exhibition Strain Mixed. Our Cineraria trials clearly show us that the Howard and Smith strain of Giants is superior in rich coloring. Practically 100 per cent true Giants. This type has limited value for commercial growers.

Tr. pkt., \$1.00; 1/64 oz., \$2.75.

Stellata or Star Mixture. This small-flowered strain under favorable conditions grows 2-3 ft. Used for either pots or cutting.

Tr. pkt., 50c; 1/32 oz., \$1.25.

Plenissima, Double Mixed. Finely rounded, full double flowers about 1½ inches in diameter. Of interest as a novelty.

Tr. pkt., 75c.

NEW STRAINS

Eriksson's Private Stock. A Berlin Market selection made by a Chicago pot plant specialist. Preferred by some growers. Good stock.

Tr. pkt., \$1.00; 1/64 oz., \$1.75.

***Grandiflora Nana Mixture.** (New.) We found this strain in Germany, and in our trials it proves uniformly dwarf, large-flowered, and practically 100 per cent light centered. Our trials sown Oct. 1st produced 4 in. plants for Mother's Day. 8-10 in. height with same diameter. Excellent commercial stock.

Tr. pkt., \$1.00; 1/64 oz., \$1.75.

Siter's Rainbaw Strain. A new market growers' strain sent out last season by a responsible eastern states grower. Described as of ideal compact growth and with practically 100 per cent light eye flowers.

Tr. pkt., \$2.00.

PRIMULAS

A valuable class of pot plants. For hardy Primulas, that are becoming increasingly popular as spring pot plants, see page 28.

OBCONICA PRIMULAS

(1200 seeds per tr. pkt., 155,000 seeds per ounce)

In flower the Obconicas are the most colorful class of Primulas, and their popularity seems on the increase. To conserve the germination of the seed, we supply it only in sealed glass containers, protecting it against excessive drying out or moisture. This packing is done by our German grower of this seed. Except in the trade packet size, we make no additional charge for this form of protection. But please bear in mind that germination of this seed requires care, especially avoid keeping it over-wet.

***Mohnstein's Rark Red.** Well known dark red.

Fasbender's Red. Extra large deep crimson.

Mahnstein's Atrosanguinea. Dark red.

***Mueller's (Berlin) Rose.** Bright clear rose.

***Mueller's Rosea.**

Coerulea. Fairly dark blue.

Sa'mon Queen. Salmon or coral-rose.

Alba. (White.) An increasingly popular color.

***Lachsrosa.** Large bright rose with enough salmon shading to make it highly attractive.

Any above priced at: Tr. pkt. (1/128 oz.), \$1.10; 1/64 oz., \$2.00; 1/32 oz., \$3.75.

Mixture. Carefully blended mixture of above colors.

Tr. pkt., (1/128 oz.), 60c; 1/64 oz., \$1.00; 1/32 oz., \$1.75.

***Better Days.** (New.) Large flowered deep carmine-red. Compact, desirable habit, making it a fine pot plant. Tr. pkt. (1/128 oz.), \$1.10; 1/64 oz., \$2.00; 1/32 oz., \$3.75.

Portland Beauty. (New.) Double flowering rose-pink; excellent. Tr. pkt., \$1.50.

MALACOIDES PRIMULAS

(425,000 seeds per ounce)

Most popular of the annual class are the "Baby Primulas". They grow into salable flowering plants quickly and are in no way irritating. It is important to maintain the soil uniformly moist for this class. The occasional rotting out that happens in this class is due, we believe, to allowing them, at any stage of their growth, to get too dry. Light sandy soil with plenty of humus or organic material is necessary for all classes of Primulas. Because of their rapid growth, sowing is not usually done until June-July, though for 4 or 5 in. pot specimens at Christmas, May sowing is sometimes done. We sow our trials of Malacoides Oct. 1st and have nice 3 in. flowering plants by Easter and Mother's Day. Such plants make excellent combination material at that time.

THE BEST VARIETIES ARE AS FOLLOWS:

Stars (*) indicate those we find the choicest. Descriptions are based on our greenhouse trials.

ERIKSSONI STRAINS

***Baby Rose.** Extra good bright color; compact growth. We find this the best of the Erikssoni varieties.

New Baby. Large, fairly compact deep rose.

***Brilliancy.** Attractive crimson-red. Outstanding color in combinations.

***Baby Alba.** Good size, nearly clear white. Best white.

Appleblossom. (New.) Extra light appleblossom-pink.

Above priced at: Tr. pkt., \$1.00; 4 pkts., \$3.00.

***Riverside.** (New.) Clear salmon-pink; extra fine. Tr. pkt., \$1.25.

Princess Marv. We find this English variety a quite deep rose; excellent. Tr. pkt., 50c; 1/64 oz., \$1.00.

***Rasea Superba.** Bright orchid-rose. Choice color, extra large flowered, and compact in growth. Excellent. Tr. pkt., 50c; 1/16 oz., \$1.25.

Weihenstephan. Clear attractive salmon-pink; fine. Tr. pkt., 50c; 1/64 oz., \$1.00.

Mixture. Well balanced mixture of above.

Tr. pkt., 50c; 1/32 oz., \$1.75.



The demand for white flowers is reflected in the popularity of this color in Malacoides Primula

CHINESE PRIMULA

(18,000 seeds per ounce)

Because of the fine range of attractive colors and the ease with which they are grown, Chinese Primula are increasingly popular. A May or June sowing is necessary for 4 or 5 in. pot plants for Christmas. July and August sowing will produce late winter and spring plants.

***Dazzler.** Vivid orange-red. Outstanding new color in this class. Tr. pkt., \$1.00.

OTHER STANDARD COLORS ARE:

***Defiance.** Deep red, dark center; fine. Tr. pkt., 50c; 1/64 oz., \$1.25.

Chiswick Red. Rich bright red. Tr. pkt., 50c; 1/64 oz., \$1.25.

Coerulea. Very excellent light blue. Tr. pkt., 50c; 1/64 oz., \$1.25.

***Gigantea Alba.** Extra large clear white. Tr. pkt., 50c; 1/64 oz., \$1.25.

***Rose Queen.** Large bright carmine-rose. Excellent. Tr. pkt., 50c; 1/64 oz., \$1.25.

***Duchess.** White with attractive Tyrian rose center. Tr. pkt., 50c; 1/64 oz., \$1.25.

Mixture. Carefully balanced mixture of above. Tr. pkt., 50c; 1/64 oz., \$1.25.

VARIOUS PRIMULAS

Primula Kewensis. 320,000 s. Deep yellow, winter flowering pot plant. 10-12 in. Tr. pkt., 50c; 1/32 oz., \$1.50.

For Hardy Primulas, see page 28.

BEGONIAS

Fibrous-Rooted

(Approx. 35,000 s. per 1/32 oz.) Considerable progress is being made in the development of this class.

The value of some of the newer varieties of this easily grown class of Begonias is not generally appreciated. Such extra large flowered kinds as Lightning, Albert Martin, and Elegant, and the bronze foliaged Indian Maid and Carmen, will do much to make the business of every retail grower more attractive and valuable. They are excellent to use as pot plants in all sizes, for they keep themselves well covered with flowers. For pot-plant use a number of choice dwarf kinds are available, notably Darling, Pink and Red Pearl, and Luminosa Compacta. For combination plant arrangements they supply choice color. Throughout Europe they are most effectively used for bedding. While they are not as well adapted here for that purpose because of our excessive heat, if planted where protected from the sun of midday and a light, well-enriched soil is used, they will give a very good account of themselves. Of course, they must be kept uniformly moist at the roots under all growing conditions, especially during midsummer. Considering that you can grow a strong 2½ in. pot plant from seed in around four months, we repeat—these Begonias, with their many uses, are indispensable to every retail grower.

OUTSTANDING VARIETIES

- ***Red Pearl.** (New.) Bright scarlet flowers freely produced on extra compact round plants. Unusually dwarf and free-flowering habit. Tr. pkt., \$1.00.
- ***Pink Pearl.** (New.) Same valuable habit as Red Pearl, but flowers are a clear rose-pink. Tr. pkt., \$1.00.
- Scandinavia.** (New.) Distinctive point about Scandinavia is its very large flower. Good pot plant habit, flowers of nice bright pink shades, well set off by deep green foliage. Excellent. Tr. pkt., \$1.50; 3 pkts. for \$4.00.
- ***Essen.** (New.) Buds are a bright cherry-red turning to amaranth-cherise as they open; an unusually nice effect. Besides being quite outstanding for coloring, Essen is of dwarf, freely branching habit, highly desirable as a pot plant. Tr. pkt., \$1.00.
- ***Glow** (Glut). Foliage a metallic bronze-color with freely produced rich, scarlet flowers. Quite similar to Indian Maid, but possibly even more desirable pot plant habit. Tr. pkt., \$1.00.
- ***Lightning.** Strikingly large carmine-scarlet flowers; deep green foliage. Unusually fine for color and size of flowers. Tr. pkt., \$1.00; 1/64 oz., \$1.75; 1/32 oz., \$2.75.
- ***Elegant.** Flowers bright rose with light center; extra large. Attractive coloring, with luxuriant green foliage, makes Elegant well named. Tr. pkt., \$1.00; 1/64 oz., \$2.00; 1/32 oz., \$3.50.
- ***Darling.** Bright clear rose under glass, becoming carmine-rose outdoors. Well shaped for pots or bedding and unusually free-flowering. Tr. pkt., \$1.00; 1/64 oz., \$2.25; 1/32 oz., \$4.00.
- ***Indian Maid.** Foliage a deep lustrous bronze with richly contrasting scarlet flowers. Really quite outstanding for color effect. See Novelty List on page 2 for further description. Tr. pkt., \$1.00; 1/64 oz., \$2.00; 1/32 oz., \$3.50.
- Carmen.** The original bronze-leaved Begonia. Flowers are bright rose-pink, a color that contrasts well with the dark foliage. Tr. pkt., \$1.00; 1/64 oz., \$1.75; 1/32 oz., \$3.25.
- ***Luminosa Compacta.** Bright scarlet; extra dwarf selection from Luminosa. Ideal as a dwarf bedding variety. Tr. pkt., \$1.00; 1/64 oz., \$2.00.

STANDARD LIST

- Albert Martin.** Extra large; bright carmine. Tr. pkt., 50c; 1/32 oz., \$1.00.
- Christmas Cheer.** Fairly dwarf crimson-scarlet. Tr. pkt., \$1.00; 1/64 oz., \$1.40; 1/32 oz., \$2.25.
- Erfordia.** Clear pink; extra free flowering. Tr. pkt., 50c; 1/32 oz., \$1.50.
- Fire Sea** (Blaze of Fire). Large fiery red flowers with green foliage. Tr. pkt., \$1.00; 1/32 oz., \$2.00.
- Glory of Erfurt.** Large bright rose or carmine. Tr. pkt., 50c; 1/64 oz., \$1.15; 1/32 oz., \$2.00.
- Gustav Knaake.** Salmon-pink, resembling Melior. Tr. pkt., 50c; 1/32 oz., \$1.60.
- Luminosa.** Deep scarlet, reddish brown foliage, fine. Tr. pkt., \$1.00; 1/32 oz., \$1.75; 1/16 oz., \$3.00.



The fibrous rooted Begonias reach their highest usefulness as pot plants for spring sales. Sow seed any time from May to December.

- Mignon.** Brilliant salmon-scarlet; semi-dwarf. Tr. pkt., 50c; 1/32 oz., \$1.75.
- ***Prima Donna.** Light rose-pink shading to carmine-pink outdoors. One of the best standard varieties. Tr. pkt., \$1.00; 1/32 oz., \$2.15.
- Radia.** Extra large carmine-scarlet; green foliage. Tr. pkt., \$1.00; 1/32 oz., \$2.25.
- Scarlet Queen.** Large scarlet; bronze-green foliage. Tr. pkt., 50c; 1/32 oz., \$1.50.
- Vernan.** Deep blood-red; dark leaved. Tr. pkt., 35c; 1/16 oz., 75c.
- White Pearl.** Standard white. Tr. pkt., 50c; 1/32 oz., \$1.65.
- Mixture.** Of all colors in this class. Tr. pkt., 50c; 1/32 oz., \$1.00.

TUBEROUS ROOTED BEGONIAS

- Laydi Mixed.** Of graceful pendulous habit, fine for pots and hanging baskets. Nice 4-inch plants mature in 6 to 7 months. Flowers double, about 2 in., and in shades of scarlet, salmon and white. Tr. pkt., \$1.00; 1/128 oz., \$3.00; 1/64 oz., \$5.00.
- Laydi Red Shades.** Similar to above but shades of scarlet. Tr. pkt., \$1.00; 1/128 oz., \$3.60.
- Mrs. Helen Harms** (Multiflora fl. pl.). This valuable deep canary-yellow Begonia has previously been propagated only by cuttings, but is now made available from seed. About 90 per cent true double; flowers about 1½ in., and very freely produced. See Novelty List on page 2 for further description. Tr. pkt., \$1.00.
- Narcissus-Flowered.** Flowers closely resembling Narcissus, and about 3 in. across. Attractive mixture. Tr. pkt., \$1.00.
- Rex Hybrids.** Ornamental leaved mixture of Rex Begonias that produces attractive variations. Seed is very small and must not be covered. 500 seeds, \$1.75; 1000 seeds, \$3.25.
- LARGE FLOWERED SINGLE TYPES.** Many over 5 inches.
- Aurora.** Buff-yellow to cerise-orange.
- Orange.** Bright medium shade.
- Light Rose.** A fairly light clear color.
- Scarlet.** A very deep bright color.
- Mixture** of above and other shades in this class. Each: Tr. pkt., 50c; 1/64 oz., \$1.35.
- LARGE FLOWERED DOUBLE TYPES.** Not quite so large as above.
- Carmine.** A deep shade of orange-carmine.
- Lafayette Hybrids.** Bronze leaved orange-scarlet.
- Light Rose.** **Orange.** Each: Tr. pkt., \$1.00.
- Mixture** of many shades in this double class. Tr. pkt., \$1.00; 1/128 oz., \$3.00.

German growers produce choice 4- to 5-inch pot-flowering tuberous Begonias in 6 to 7 months from seed.

CALCEOLARIA

(Approximately 20,000 seeds per 1/64 ounce)

Nicely grown Calceolaria make irresistibly fine pot plants. Grow in a cool house, watch closely for uniform moisture, and protect from the sun.

Germinating this fine seed calls for close attention. The germ or seed is so small that it very easily perishes if allowed to get a bit dry as the seed is sprouting. On the other hand, if kept too wet, it will rot, especially in old soil and a high temperature. In germination tests, we do not cover

it. Use sandy quickly drained soil, make quite level, water well, sow thin, and cover the flat or pan with a piece of glass. Gradually give more air as the seed germinates. Watch this closely or the seedlings will rot. Remember that Calceolarias are cool temperature plants, and green fly will find them. The earliest sowing should be made in early July. Our trials are sown October 1st and are flowered in 4-in. pots around Mother's Day, and from these greenhouse trials we have starred varieties we consider finest.



This cut pictures three distinct classes of Calceolarias. On right is the fairly tall, spotted *Tigrina*. The ever-popular *Multiflora Nana* is in the center with a Dwarf Tigered *Grandiflora* on the left. Seed for these was sown early October, flowering in May. With electric lights, a July sowing can be flowered by late February. Apply lights 5 hours each night from November 15th until they show color.

***Cloth of Gold.** Medium size flowers; rich pure golden yellow self. Tr. pkt., \$1.00; 1/64 oz., \$2.25.

Kelway's Perfect Model. We supply originator's seed of this well known strain. Produces a wide range of colors. Fairly tall growth.

Tr. pkt., \$1.00; 1/64 oz., \$2.25; 1/32 oz., \$4.25.

Tigrina. All flowers attractively tigered or spotted; medium size flowers and fairly tall growth. Tr. pkt., \$1.00; 1/64 oz., \$2.50.

Mixture of Grandiflora varieties.

Tr. pkt., \$1.00; 1/64 oz., \$2.00; 1/32 oz., \$3.50.

***Monarch Strain.** A strong growing, attractively colored Grandiflora Mixture; a trifle later flowering than the regular mixture, but quite fine. Tr. pkt., \$1.00; 1/64 oz., \$2.25; 1/32 oz., \$4.00.

MULTIFLORA NANA CLASS

Dwarf, free-flowering, brightly colored, and undoubtedly the most popular for smaller pot plant sizes.

***Multiflora Mixture.** Most widely used. Uniformly dwarf and very attractive. See Novelty List, page 2 for further description.

Tr. pkt., \$1.00; 1/128 oz., \$2.25; 1/64 oz., \$4.25.

***Golden Tiger.** Golden yellow, richly spotted red; excellent.

Tr. pkt., \$1.00; 1/128 oz., \$2.00; 1/64 oz., \$3.60.

***Indian Prince.** Rich deep scarlet. Continues to throw a few Golden Tiger types, which it has done since we introduced it three years ago. A fine bright color. Tr. pkt., \$1.00; 1/128 oz., \$2.25; 1/64 oz., \$4.25.

RUGOSA TYPE

Flower Cloud. The result of a cross between Rugosa and Grandiflora. Flower Cloud carries the desirable hardness of the Rugosa; also it stands handling exceptionally well. Flowers not large, but very freely produced. Colors largely bright yellow with some brown and orange. Tr. pkt., \$1.00; 1/128 oz., \$3.75.

Perennial Hybrids. A very small flowered type used for large exhibition work and for bedding in temperate climates. Tr. pkt., \$1.00.

HYBRIDA GRANDIFLORA Or Large-Flowered Varieties

***Dwarf Tigered and Spotted Mixed.** A very uniformly dwarf tigered and spotted large-flowered mixture. Attractively colored, more dwarf than the Multiflora Nanas and much larger flowered. See Novelty List, page 2. for further description. Tr. pkt., \$1.00; 1/64 oz., \$2.50; 1/32 oz., \$4.50.

Albert Kent. Flowers golden yellow with large red blotch on each. Tr. pkt., \$1.00; 1/64 oz., \$2.50.

Albert Kent Hybrids. Intermediate in size of flowers. Very excellent range of colors. Tr. pkt., \$1.00; 1/64 oz., \$2.00.

SCHIZANTHUS

(45,000 seeds per ounce)

Schizanthus have real value for both pot plants and cut flowers; they will easily outlast Peas in water. A sowing made early in August will flower nicely for Valentine's Day if grown 48 degrees; growth must be hardened or checked to force them into flower. For large specimens or cut flowers use such strains as Dr. Badger's, Giant Blotched, or Monarch Strain.

The Dwarf strain we are developing is fine for pot plant work only. A late September sowing will come in nicely by Easter in 4's—in which size it sells well.

***Ball Brilliant Blend.** Our medium tall mixture of fairly dark, bright colors, all large flowered. Particularly well suited for cutting; but if properly pinched, will make fine specimen pot plants. A carefully balanced mixture, Ball Brilliant Blend will, this year, contain only such fine strains as Giant Blotched, Dr. Badger's Bridal Veil, and some Purple Shades. Tr. pkt., 35c; 1/8 oz., 75c; 1/4 oz., \$1.15.

***Ball's Dwarf.** About half the height of regular Schizanthus, Ball's Dwarf Mixture is really quite distinctive and valuable as a pot plant, especially when used in smaller sizes. Plants are unusually compact, well rounded, and literally covered with small but attractive flowers. We are doing much work to improve the habit and darken the color balance of this strain, but even in its present form it is enjoying much popularity as a 4-in. pot plant. See Novelty List, page 3 for further description. Tr. pkt., 50c; 1/8 oz., \$1.00.

***Dr. Badger's Improved Hybrids.** A medium dwarf, compact strain, extra large flowered and of choice color mixture. This is an excellent all-purpose strain, being compact enough for large pot plants, and will become long-stemmed enough for cutting. Tr. pkt., 35c; 1/4 oz., \$1.00.

***Pansy Flowered.** (Danbury Park Strain.) The first real Pansy-Flowered strain we have seen in our trials. Comes around 90 per cent true to attractive flat pansy-like flower form. Soft pastel shades, including rose-pink and deep lavender, all "self" colors. Exceptionally free flowering, and of good compact medium tall habit. Tr. pkt., 35c; 1/8 oz., \$1.00.

***Giant Blotched.** Particularly fine for cutting because of its bright colors in which there are few or no heavy ones. It is distinguished by each flower having a bold dark center that contrasts effectively with the generally light pink colors. Also, we find it two to three weeks earlier flowering than any other strain. Effective as a pot plant if kept well pinched. See Novelty List, page 3 for further description. Tr. pkt., 50c; 1/16 oz., \$1.00.

***Monarch Strain.** (Hurst.) An extra large flowered strain, flowers being even some larger than Dr. Badger's Hybrids with the same desirable medium tall pot plant habit. Choice range of rich colors, with many bright rose shades. Tr. pkt., 50c; 1/16 oz., \$1.00.

Bridal Veil. Pure paper-white and of medium tall habit. Tr. pkt., 35c; 1/4 oz., \$1.25.

Brilliance. Bright amaranth-red. Comes uniformly true. Tr. pkt., 50c.

Compactus Reddish Shades. Of medium dwarf habit with rich shades of deep rose and red predominating. Tr. pkt., 35c; 1/4 oz., \$1.00.

Pink Shades. Same as above except in color. Tr. pkt., 35c; 1/4 oz., \$1.00.

Purple Shades. A mixture of rich purple and deep lavender shades. Tr. pkt., 35c; 1/4 oz., \$1.00.



SCHIZANTHUS, Ball Dwarf Strain
The attractive form and free-flowering habit of these plants have increased their popularity every year since their introduction.

MISCELLANEOUS ANNUALS

® Indicates varieties suitable for rock garden work.

(*) Indicates varieties most dependably satisfactory in our experience and observation

SEEDS PER OUNCE (approximate of course) of varieties in this list are inserted thus: "Abutilon Mixed, 850 s.," indicating 850 seeds per ounce. These figures are not absolutely accurate of course; they are put in for your benefit in ordering the amount of seed you need. Don't forget that this figure DOESN'T INDICATE PLANTS PER OUNCE. Average handling might MATURE PLANTS from 50 per cent of the seeds you sow; less than that with very fine seeds and same hardy perennials.

ABUTILON

Mixed. (Flowering Maple). 850 s. We handle exclusively the extra large flowered and early flowering strain. Attractive for pot, conservatory or bedding plants.
Tr. pkt., 35c; 1/8 oz., \$1.25.

ACHIMENES

Mixed. Attractive pot and hanging basket subjects for warm house conditions. Tr. pkt., \$1.00.

ALOE

Voriegata. (Tiger Aloe). 6,500 s. One of the most popular and generally satisfactory succulents, especially as a house plant. 100 seeds, \$1.00; 1000, \$3.00.

ASPARAGUS

We have supplies of both varieties on hand for immediate shipment that have repeatedly shown germination tests above 70 per cent. Use at least 65-degree soil temperature for good germination.
Plumosus. The finer textured kind.
Sprengeri.

Prices on above: 100 seeds, 25c; 250 seeds, 40c; 1000 seeds, \$1.00; 5000 seeds, \$4.50; 1 lb., \$8.00.

For the hardy Asparagus Verticillatus, see page 24.

BALSAM

DOUBLE BUSH FLOWERING. 3,300 s. Improves the old Camellia-flowered type in bearing flowers on top of each stem instead of down where they are hidden.

Cinnabar, Rose, Scarlet, Vermilion-Red, White, Mixture.

Each: Tr. pkt., 25c; 1/4 oz., 75c; 1 oz., \$2.50.

BROWALLIA

60,000 s. A sowing from July on will produce very free flowering pot plants about Christmas. Carnation house conditions are suitable. Will withstand living room conditions very well.

Speciosa Major. The standard deep blue winter-flowering variety.
Tr. pkt., 35c; 1/16 oz., \$1.00.

Speciosa Major Albo. Same as above but white.

Tr. pkt., 50c; 1/64 oz., \$1.50.

***Viscosa Compacto, Sapphire.** Improves the above type with a more compact growth and attractive small white-eyed flowers.
Tr. pkt., 35c; 1/16 oz., \$1.00.

CANDYTUFT

Giant Hyacinth-Flowered White. (Ball Strain). 9,000 s. A mid-October sowing planted on a raised bed will flower during mid-winter. Most popular for January sowing to flower in spring. We select stock seed annually for our "Ball Strain," and it will be found an excellent one.

Tr. pkt., 20c; 1 oz., 75c; 4 ozs., \$2.35; 1 lb., \$7.50.

CENTAUREA

Valuable early spring cut flowers if grown on a raised bed from a December sowing.

Suaveolens. Attractive fairly large yellow thistle-like flowers.

Tr. pkt., 15c; 1 oz., 40c.

CYANUS (Bachelor Button). 6,500 s.

***Blue Boy, Carmine, *Pinkie, Rose, White, Mixture.**

Each: Tr. pkt., 15c; 1 oz., 40c; 4 ozs., \$1.30; 1 lb., \$4.00.

COLEUS

HYBRIDA. 110,000 s. From a December sowing, seedling Coleus make fine material for early spring combination work. Extra choice colored specimens are easily propagated from cuttings.

Giant Exhibition Mixture. Our finest strain from standpoint of large percentage of brilliantly colored plants.

Tr. pkt., 75c; 1/32 oz., \$1.75.

***Rainbow Mixture.** A very excellent all-purpose strain.

Tr. pkt., 35c; 1/16 oz., \$1.00.

Dwarf Red Shades. Shades of autumn, red and bronze, large leaved.
Tr. pkt., 40c.

Hybrido Mixture. Tr. pkt., 35c; 1/8 oz., 60c; 1 oz., \$3.50.

Usually the more stock grown the lower are returns. Don't overdo.

COSMOS

Orange Flare. Medium large flowered, brilliant orange. A fine early spring color.

Tr. pkt., 25c; 1/4 oz., 35c; 1 oz., \$1.00.

SENSATION. The new extra early large-flowered strain.

Pinkie. A pink selection from Sensation.

Purity. A white selection from Sensation.

Each: Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.75.

Mixture of above. Tr. pkt., 25c; 1/4 oz., 45c; 1 oz., \$1.35.

CYNOGLOSSUM

AMABILE (Chinese Forget-me-not). 5000 s. 24 inches. Nice cut flower material.

***Blue Bird.** Tr. pkt., 20c; 1/4 oz., 40c; 1 oz., \$1.25.

Blue. Tr. pkt., 15c; 1 oz., 30c.

Pink. Tr. pkt., 15c; 1 oz., 50c.

CYPERUS

Alternifolius (Umbrella Plant). 60,000 s.

Tr. pkt., 20c; 1 oz., \$1.00.

DAHLIA 2,800 s.

***Unwin's Dwarf Hybrids.** 18 in. Outsells all other varieties with us. Our strain of this double and semi-double strain has a particularly wide range of brilliant colors.

Tr. pkt., 25c; 1/4 oz., 55c; 1 oz., \$2.00.

Lilliput or Pompon Mixture. 24 in. A good proportion are perfectly formed, fully double pompon-like flowers.

Tr. pkt., 75c; 1/8 oz., \$1.35.

Decorative and Cactus Mixed. 30 in. Varies considerably in flower type and height. Contains excellent specimens for tuber-propagation.

Tr. pkt., 50c; 1/4 oz., \$1.60.

COLTNESS STRAIN. 18 in. Single. Uniformly dwarf and true to color.

Scarlet Gem. A bright color.

Yellow. Each: Tr. pkt., 25c; 1/4 oz., 60c; 1 oz., \$2.25.

Mixture of all colors in this attractive class.

Tr. pkt., 25c; 1/4 oz., 45c; 1 oz., \$1.50.



Dahlia, Unwin's Dwarf Hybrids. A fall sowing will produce fine tubers for following spring.

MISCELLANEOUS ANNUALS — Continued

DELPHINIUM

CHINENSIS. 20,000 s. A fine kind for spring greenhouse or sash house forcing from a fall sowing.

***Cambridge Blue.** The standard variety. Belladonna blue. Tr. pkt., 35c; 1/4 oz., 60c; 1 oz., \$2.25.

Dark Blue. **White.** Each: Tr. pkt., 20c; 1 oz., 75c.

Mixture. Tr. pkt., 15c; 1 oz., 70c.

For Perennial Delphinium, see pages 25 and 26.

*DIDISCUS

Coeruleus (Blue Lace Flower). 10,000 s. Quite valuable novelty cut flower. Sow during the summer for late fall flowering, later for an after-Mum crop or in midwinter for a spring crop that is especially fine. Tr. pkt., 15c; 1/4 oz., 25c; 1 oz., 80c.

DRACAENA

Indivisa. 1500 s. The narrow-leaved and most popular variety. Tr. pkt., 15c; 1 oz., 40c; 4 ozs., \$1.25; 1 lb., \$4.25.

Australis. 1000 s. The broad-leaved kind. Tr. pkt., 20c; 1 oz., 75c.

*EXACUM

Affine Atracoeruleum. 800,000 s. A very nice richly fragrant pot plant. Flowers deep lavender with contrasting yellow stamens and attractive light green foliage. Tr. pkt., \$1.00; 1/64 oz., \$2.25.



Gerbera Jamesani
Flowers last 10 days to 2 weeks after cut. They do best in a light or sandy, well-drained, deep soil, and a 55-degree house.

GERBERA

Jamesani Hybrids. 7,500 s. Popular greenhouse forcing plant and useful for gardening where winters are not too severe. 100 seeds, 40c; 500 seeds, \$1.75; 1000 seeds, \$3.00.

GLOXINIA 425,000 s.

***Crimsan Glow.** Rich velvety crimson-scarlet. Very free flowering. Tr. pkt., \$1.00; 1/64 oz., \$1.60.

***Frederick Benary** (Gigantea). Very bright white-throated scarlet. Tr. pkt., \$1.00; 1/64 oz., \$2.25.

Defiance. Rich glowing scarlet. Tr. pkt., \$1.00; 1/64 oz., \$1.60.

Emperor William (Crassifolia Erecta). Dark violet bordered white. Tr. pkt., \$1.00; 1/64 oz., \$1.60.

Tigered and Spotted Mixture. Attractively variegated colors. Tr. pkt., \$1.00; 1/64 oz., \$1.60.

***Benary's Giant Mixture** (Gigantea). The finest mixture we know of. Tr. pkt., \$1.00; 1/64 oz., \$1.50.

GREVILLEA

Robusta (Australian Silk Oak). 3,000 s. Fine for specimen or combination work. Enjoys considerable heat and a well-drained loose soil. Tr. pkt., 20c; 1 oz., 75c.

GYPSOPHILA

ELEGANS (Baby's Breath). 24,000 s. The first two strains listed, for extra large flowers and strong growth, are the finest.

***Covent Garden Market.** A very excellent uniformly large flowered and strong growing strain. 1 oz., 20c; 4 ozs., 50c; 1 lb., \$1.60; 5 lbs., \$6.50.

Landon Market. Extra large flowered and strong growing strain. 1 oz., 25c; 4 ozs., 60c; 1 lb., \$1.75; 5 lbs., \$7.00.

GYPSOPHILA—Continued

***Paris Market.** The standard medium sized strain. Because of its smaller flowers, will outlast the above larger flowered strains when cut.

1 oz., 15c; 4 ozs., 40c; 1 lb., \$1.00; 5 lbs., \$4.50.

Carminea. Same as Paris Market except a light carmine-pink shade.

Tr. pkt., 15c; 1 oz., 25c; 4 ozs., 75c.

Crimsan. Same as above two varieties except a deep carmine-crimson.

Tr. pkt., 15c; 1 oz., 25c; 4 ozs., 75c.

For Perennial Gypsophila, see page 28.

HELIOTROPE

5,300 s. Easily grown from seed, flowering in 6 months from sowing.

***Dwarf Regale Mixture.** 12 to 14 in. The preferred strain for clear colors and even growth.

Tr. pkt., 30c; 1/4 oz., 50c; 1 oz., \$1.50.

Lemcine's Giant Mixture. 2 ft.

Tr. pkt., 25c; 1/4 oz., 40c; 1 oz., \$1.35.

IMPATIENS 20,000 s.

The usefulness of this already popular plant has been considerably widened by the introduction of a new dwarf strain. A July or August sowing of this dwarf stock makes fine dwarf and compact 3- or 4-in. specimens by winter.

The New Dwarf Sultani Strain

3- to 4-in. pot specimens reach a height of 6 to 8 in. with a fairly compact growth and quite free flowering. Also does well outdoors during the summer in shaded location.

Bright Carmine. An attractive bright shade available for immediate shipment.

Tr. pkt., 50c; 1/32 oz., \$1.15.

Mixture. A bright mixture of many shades in this new dwarf strain. No seed of this mixture available until our new crop comes in—October.

Tr. pkt., 50c; 1/32 oz., \$1.00.

MISCELLANEOUS STRAINS

Sultani. Bright rose. 18 in.

Tr. pkt., 50c; 1/16 oz., \$1.00.

Halsti Liegnitzia. Vermilion-red. Free flowering.

Tr. pkt., 35c.

Holsti Hybrids. Mixture.

Tr. pkt., 50c; 1/16 oz., \$1.00.

Oliveri. 15,000 s. Rosy lilac. 24 in.

Tr. pkt., 75c.



A DWARF IMPATIENS

This was found last season in Germany cataloged as Impatiens Sultani Hybrida Nana. It is uniformly compact in growth and should find a place among small plant combinations and far bedding if favored with partial shade. Colorful through most of the year and easily propagated through seed or cuttings.

MISCELLANEOUS ANNUALS — Continued

IPOMOEA (Moonflower)

Heavenly Blue. Clark's Mammoth Early Free Flowering Strain.
400 s. Tr. pkt., 20c; 1 oz., 75c.

KALANCHOE

Globulifera coccinea (Blossfeldiana). Sowing up to July or August of this popular pot plant produces flowering plants in late spring. Very fine seed and should be given care in germination.
Tr. pkt., 60c; 3 pkts., \$1.35.

LUPINES (Annual)

Good Lupines available in early spring bring nice money and in addition, make an ideal after-Mum rotation. Seed should be sown for this crop in late summer, 3 or 4 seeds in a 3- or 4-in. pot (later thinned to strongest one), and kept in a cold frame until beds are ready indoors. Will stand light frosts when started in this way. Careful watering, ventilation, and temperatures under 50 are important.

***Sulphureus Superbus.** 600 s. The good yellow variety for forcing.
Tr. pkt., 15c; 1 oz., 45c.

Luteus Romulus. 300 s. 15 in. Richly fragrant dwarf yellow. Prefer the above for forcing. Tr. pkt., 15c; 1 oz., 45c.

***GIANT KING.** 1400 s. We prefer this long-stemmed early class for greenhouse forcing.

***Oxford Blue.** Standard rich deep blue.

Sky-Blue.

***Heliotrope.** A pleasing rosy purple shade.

White.

Mixture of all colors in this fine class.

Each: Tr. pkt., 20c; 1 oz., 50c; 4 ozs., \$1.35.

HARTWEGI. 1600 s. The standard cut flower type.

Dark Blue. Roseus. Sky-Blue. White. Mixture.

Each: Tr. pkt., 15c; 1 oz., 30c; 4 ozs., 80c.

For Perennial Lupins, see page 27.

MARIGOLD

For midwinter flowers, Marigolds are hard to beat. Bright, positive colors that are not affected by spells of dark weather, free-flowering, and ease of culture are points that shouldn't be overlooked.

WINTER FLOWERING. 9000 s. The following are "short day" varieties that flower only in the short days of winter. The sowing season is, therefore, limited in our latitude, beginning end of July to first part of November. Should be planted in raised bed 10x12 in. This free-flowering class **SHOULD NOT BE MISSED** by any miscellaneous crop grower. 15 ft. on the end of a bench will be ample for retail growers.

***Australian Tree.** The standard variety. Rich mahogany-red with golden yellow crest. Although most flowers will be double, a few singles will appear and can readily be used.
Tr. pkt., 25c; ½ oz., 60c; 1 oz., \$1.00.

Lieb's. Quite similar to above. Tr. pkt., 50c; ¼ oz., \$1.00.

Lieb's Winter Sunshine. (New.) Described by originator as same as above but golden orange with yellow center.
Tr. pkt., 50c.

GIANT AFRICAN. 10,000 s. From a mid-August sowing transplanted in flats 4 inches apart, plants of this class will run up single-stemmed and produce a fine crop of flowers on 18-in. stems in December. Try it.

All-Double Orange. All-Double Lemon.
Each: Tr. pkt., 25c; ¼ oz., 50c; 1 oz., \$1.50; 4 ozs., \$5.00.

All-Double Mixture.
Tr. pkt., 25c; ¼ oz., 40c; 1 oz., \$1.35; 4 ozs., \$4.00.

Prince of Orange. Lemon Queen.

Golden Emblem. Mid-way between the orange and lemon varieties in color.
Each: Tr. pkt., 25c; ¼ oz., 50c; 1 oz., \$1.50; 4 ozs., \$5.00.

***Sunset Giant.** This extra large flowered variety does exceptionally well when handled as outlined above. Much larger flowered than the regular Giant African varieties. Shades of orange and yellow.
Tr. pkt., 35c; ¼ oz., 50c; 1 oz., \$1.80.



Showing spikes of the new Giant King class of annual Lupine—the class to stay by for greenhouse cutting.

MIGNONETTE.

27,000 s. We continue to find this old-fashioned flower quite profitable as a spring cut flower item. Should be sown in August in pots and planted out in a Carnation house 10x12 in. Disbudding and supports are necessary for fine, long-stemmed flowers.

***Ball Strain.** Our own greenhouse strain selected for earliness and large spikes of light colored flowers. Two to three weeks earlier than New York Market.

½ tr. pkt., 60c; tr. pkt., \$1.00; ¼ oz., \$1.75; 1 oz., \$6.00.

New York Market. Tr. pkt., 75c; ¼ oz., \$1.50.

MIMOSA

Pudica (Sensitive Plant). 4500 s. Tr. pkt., 15c; 1 oz., 35c.

MYOSOTIS (Forget-me-not) 44,000 s.

***Ball Early.** This strain is outstanding for early flowering habit. An August sowing will be in full flower in November, while the regular Blue Bird under same conditions will not flower until the following February. Bright clear blue flowers throughout the dark winter months on 8 to 12 in. stems gives this variety real value for midwinter cutting.
Tr. pkt., 25c; ¼ oz., 60c; 1 oz., \$2.00.

***Ruth Fischer.** A very excellent dwarf winter flowering strain for pots. Quite free-flowering. Light, clear blue.
Tr. pkt., 35c; 1/16 oz., \$1.00.

For other Myosotis, see page 28.

NASTURTIUM

175 s. The following varieties are of the double climbing type that, from an August sowing, will produce an abundance of brightly colored flowers throughout the dark winter months when such stock is scarce. Plant 12 in. apart and provide a well exposed location with substantial support.

Golden Gleam. The standard golden yellow.

1 oz., 15c; 4 ozs., 35c; 1 lb., \$1.00.

Fire Gleam. 1 oz., 20c; 4 ozs., 50c; 1 lb., \$1.50.

Moon Gleam. A light cream-yellow.

1 oz., 20c; 4 ozs., 50c; 1 lb., \$1.50.

Orange Gleam. 1 oz., 15c; 4 ozs., 40c; 1 lb., \$1.25.

Salmon Gleam. 1 oz., 15c; 4 ozs., 35c; 1 lb., \$1.00.

***Scarlet Gleam.** 1 oz., 15c; 4 ozs., 40c; 1 lb., \$1.25.

Gleam Hybrids. 1 oz., 15c; 4 ozs., 35c; 1 lb., \$1.00.

MISCELLANEOUS ANNUALS — Continued



Our trial ground line of this past summer was continuously in flower at height of 4-6 in.

NIEREMBERGIA

Hippomanico. 175,000 s. Lavender-blue. A very attractive addition to spring pot plant list. Fine also for bedding outdoors. Tr. pkt., 50c; 1/32 oz., \$1.75.

SAINTPAULIA

Ionantho (African Violet). Makes a very attractive and long lasting pot plant. Very fine seed that requires careful handling in germination. Tr. pkt., \$1.00.

SMILAX

7800 s. Well known greenhouse climber. Tr. pkt., 20c; 1 oz., 50c; 4 ozs., \$1.50; 1 lb., \$5.00.

STATICE

Our supply of annual Statice is grown for us by a specialist. High germination should be expected with reasonable care.

Bonduelli. 350 seed heads. Yellow. Similar to Sinuata. Tr. pkt., 15c; 1 oz., 25c; 1 lb., \$2.25.

Sinensis. 17,000 s. 18 in. Quite attractive combination of white with canary-yellow. Very fine light seed. Tr. pkt., 25c; 1 oz., 75c; 4 ozs., \$2.50.

***Suworowi** (Russian or Rat Tail Statice). An October sowing carried along in pots and planted in a ground bed after 'Mums will make fine long spikes in February and March. A very attractive early spring cut flower item. Tr. pkt., 15c; 1 oz., 60c; 4 ozs., \$1.90.

SINUATA. 350 seed heads. An attractive late spring cut flower item from a January sowing. Grown outdoors exclusively in the South for drying.

***Market Grower's Blue.** Fine even deep blue. Excellent stock.

Kompf's Toll Improved. The standard long-stemmed blue.

Atrocoerulea.

True Blue.

***Lavender Queen.** A very attractive shade of medium lavender. Good grower.

Roseo Superba. Rosy lavender.

White.

***New Hybrids Mixture.** A very choice mixture including many new shades.

Each: Tr. pkt., 15c; 1 oz., 25c; 1 lb., \$2.50.

For Perennial Statice, see page 29.

STREPTOCARPUS

Giant Flowered Mixture. Our stock of this is grown for us by F. C. Heinemann of Erfurt, Germany, and through personal inspection of various strains, we are convinced that no better is obtainable. Tr. pkt., \$1.00.

TITHONIA

Specioso (Golden Flower of the Incas). 3500 s. Early flowering. Attractive single orange-red flowers; winter flowering in a Carnation house when roots are confined in a shallow raised bed. Ours is the early flowering strain. Tr. pkt., 25c; 1/4 oz., 90c.

Specioso, Fireboll. (New.) Tr. pkt., 50c.

TORENIA

365,000 s. Nice early spring pot plant. Rich combination of deep blue with deeper blotches on lip.

Fournieri. Standard variety.

Tr. pkt., 25c; 1/4 oz., 65c; 1 oz., \$2.25.

Fournieri Compacto. Distinctly dwarfer than the above.

Tr. pkt., 25c; 1/8 oz., 50c; 1/4 oz., 85c.

TRACHELIUM

Coeruleum. 140,000 s. A nice after-'Mum crop of fine-textured blue flower heads. Sow in late fall. Plant out 10 in. apart. Can also be flowered planted close in flats like Gypsophila. Tr. pkt., 35c; 1/8 oz., \$1.00.

WALLFLOWER (Annual)

14,000 s. Choice richly fragrant spikes flowering in spring. Should be sown in October and grown on raised beds. A circular outlining our method of handling this attractive crop is enclosed with every order for seed.

***Gold Stondord.** Deep, rich golden yellow; the best color.

Golden Yellow flaked Brown.

Each: Tr. pkt., 25c; 1/4 oz., 75c.



New Sinuata or Annual Statice, Lavender Queen. An attractive clear pastel lavender with excellent growth.

No outdoor florist crop is really paying without irrigation.

MISCELLANEOUS PERENNIALS

® indicates plants suitable for rock gardens.

(*) indicates those varieties we have found most generally satisfactory for purposes indicated.



An easily grown useful hardy perennial—
Achillea Filipendula, Parker's variety

ACHILLEA

Some among the following are exceptionally valuable for summer cutting.

***Filipendula** (Eupatorium). **Parker's Variety**. 225,000 s. 4 ft. Fall flowering. Large golden yellow umbels. If allowed to fully open, may be dried.

Tr. pkt., 25c; ¼ oz., 60c; 1 oz., \$2.25.

***The Pearl** (Ptarmica). 175,000 s. The standard double white for cutting. 30 in.

Tr. pkt., 25c; ¼ oz., 60c; 1 oz., \$2.00.

Perry's White (Ptarmica). 175,000 s. An improved double white for cutting.

Tr. pkt., 35c; ¼ oz., \$1.10.

Tomentosa Aurea. 190,000 s. 6 to 8 in. Finely serrated foliage; golden yellow umbels.

Tr. pkt., 50c; ⅛ oz., \$1.25.

ACONITUM

Fischeri (Monkshood). 9500 s. 3 ft. Deep blue flowers in dense spikes. Sow seed in the fall and allow it to stand outdoors over winter for good germination.

Tr. pkt., 25c; ¼ oz., 60c; 1 oz., \$2.00.

® AETHIONEMA

Grandiflorum (Persian Candytuft). 19,000 s. 8 to 10 in. Free flowering light rosy lilac. Likes a light, sandy, well exposed location. Hardy in our latitude.

Tr. pkt., 50c.

AGATHEA

Coelestis (Felicia amelloides or Blue Daisy). 27,000 s. 24 to 30 in. Free flowering nice blue. Sow seed in the fall and allow to stand outdoors over winter for good germination.

Tr. pkt., 25c; ¼ oz., 40c; 1 oz., \$1.25.

® ALYSSUM

The two varieties following are perfectly hardy with us and make fine, free flowering rock garden or border plants.

***Saxatile Compactum**. 40,000 s. Flowers early in May. 12 in. Rich golden-yellow.

Tr. pkt., 15c; ¼ oz., 25c; 1 oz., 85c.

***Maellendarfianum**. 58,000 s. 3 to 4 in. Very attractive dwarf rounded growth covered with yellow flowers end of May.

Tr. pkt., 35c; 1/16 oz., 75c.

ANTHEMIS

Kelwayi (Hardy Marguerite). 85,000 s. 3 ft. Yellow Daisy flowers produced first season from an early sowing.

Tr. pkt., 15c; 1 oz., 50c.

ANCHUSA

The following four varieties are perfectly hardy with us.

*® **Barrelieri**. 15 in. Flowers middle to end of May. Very fine blue rock garden plant. Improves *Myosotidiflora* in more vigorous growth and freer flowering. Perfectly hardy with us.

Tr. pkt., 25c; ¼ oz., 50c; 1 oz., \$1.75.

® **Myosotidiflora**. 10,500 s. 12 in. May-flowering. Attractive forget-me-not-blue.

Tr. pkt., 50c; ¼ oz., \$1.40; 1 oz., \$5.00.

ITALICA 1100 s.

Drapmare Strain. 6 ft. Nice blue for cutting.

Tr. pkt., 15c; 1 oz., 50c.

Grandiflora Picatee. Same as above but attractively striped white.

Tr. pkt., 25c; ¼ oz., 60c; 1 oz., \$2.00.

® AQUILEGIA (Columbine)

15,500 s. Introduction of several new, large flowered varieties in attractive new colors has widened the use of this old garden favorite. The dwarf spurless class represented by *Glandulosa Vera* makes excellent rock garden and border material.

Alpina. 2 ft. Blue.

Tr. pkt., 25c; ¼ oz., 50c; 1 oz., \$1.75.

Chrysantha, Silver Queen. Long-spurred white.

Tr. pkt., 25c; ¼ oz., 50c; 1 oz., \$1.75.

***Glandulosa Vera**. 18 in. Large spurless bright blue with white corolla. Fine compact grower for rock gardens and edges.

Tr. pkt., 75c; 1/16 oz., \$1.85.

Jaetschawi. Yellow with long red spurs.

Tr. pkt., 25c; ¼ oz., 60c; 1 oz., \$2.00.

***Langissima**. Delicate pale yellow with extra long (4 in.) spurs. Quite distinctive and richly fragrant.

Tr. pkt., 75c; 1/16 oz., \$2.25.

COERULEA. The long-spurred, large flowered type.

Blue (Rocky Mountain Columbine). Sky-blue with white corolla.

Tr. pkt., 25c; ¼ oz., 55c; 1 oz., \$1.85.

***Mrs Nicholls**. Same as above but considerably larger flower and deeper brighter color. Tr. pkt., 50c; ¼ oz., \$1.25.

***Candidissima, Snow Queen**. 18 in. Finest pure white variety. Tr. pkt., 35c; ¼ oz., \$1.00; 1 oz., \$3.50.

***Crimson Star**. Deep blood-red with white corolla. Very attractive, rich combination. Tr. pkt., 50c; ⅛ oz., \$1.20; 1 oz., \$3.00.



Aquilegia Long Spurred Crimson Star. Dark crimson and white are the distinctive contrasting colors of this variety.

MISCELLANEOUS PERENNIALS — Continued

AQUILEGIA—Continued

Rose Queen. Rose shades with white corolla.

Tr. pkt., 25c; ¼ oz., 60c; 1 oz., \$2.00.

***Mrs. Scott Elliott's Hybrids.** The popular long-spurred mixture.

Tr. pkt., 35c; ¼ oz., \$1.00; 1 oz., \$3.75.

Mixture of all colors in this Long-Spurred Class.

Tr. pkt., 25c; ¼ oz., 45c; 1 oz., \$1.50.

® **ARABIS (Rock Cress)**

150,000 s. The following two varieties are fully hardy and flower with us end of April. The new extra dwarf Snowcap is particularly fine for dwarf edgings and rock garden work.

Alpina. 12 in. White. Tr. pkt., 15c; 1 oz., 50c.

***Alpina Snowcap.** (New.) 6 in. Improves the above by a much more dwarf and compact habit. Excellent. Tr. pkt., 35c.

® **ARMERIA**

Maritima (Statice Armeria). 17,500 s. 12 in. Lilac-rose.

Tr. pkt., 35c; ¼ oz., 90c; 1 oz., \$3.25.

ASCLEPIAS

Tuberosa. 4500 s. 2 ft. Fine orange for cutting. Requires well drained location. Tr. pkt., 35c; ¼ oz., 60c; 1 oz., \$2.00.

ASPARAGUS

Verticillatus. 600 s. A valuable completely hardy source of summer green material. Light finely cut foliage. Two to three years required to get well started.

Tr. pkt., 25c; ¼ oz., 55c; 1 oz., \$1.85.

For Asparagus Plumosus and Sprengerii, see page 19.

ASTER (Hardy)

The first two varieties furnish very nice material for rock garden work as well as being tall enough for cutting. Very hardy and June flowering.

Dark Beauty (Alpina). 26,000 s. 12 in. Single deep blue.

Tr. pkt., 50c; ⅛ oz., \$1.50.

***Wartburg Star** (Subcoeruleus). 15,000 s. 18 in. Some lighter than above, larger and longer stemmed.

Tr. pkt., 50c; ⅛ oz., \$1.75.

Novi-belgi. 90,000 s. New Hybrids. Fall flowering.

Tr. pkt., 50c; ¼ oz., \$1.25; 1 oz., \$4.00.

® **AUBRIETIA**

Large Flowered Hybrids. 150,000 s. 6 in. Fine spring flowering plant for rockery and edging work. Forms cushions of foliage and flowers. Tr. pkt., 25c; ¼ oz., 50c; 1 oz., \$1.75.

BAPTISIA

Australis (False Indigo). 1700 s. Sprays of pea-shaped indigo-blue flowers. 3 ft. Tr. pkt., 15c; 1 oz., 45c.

® **BELLIS**

PERENNIS (Double English Daisy). 100,000 s. 6 in. To have flowering plants for spring sales, seed should be sown in August and carried along in frames with Pansies. Following are of the large flowered Monstrosa type.

Red. Rose. White.

Each: Tr. pkt., 25c; ¼ oz., 60c; 1 oz., \$2.25.

Mixture. Tr. pkt., 25c; ¼ oz., 50c; 1 oz., \$1.90.

BOLTONIA

Latisquama. 95,000 s. 4 to 5 ft. Delicate pink.

Tr. pkt., 25c; ¼ oz., 60c; 1 oz., \$2.00.

CALLA LILY

Elliottiana. 450 s. Yellow. Seed germinates readily but requires two years' growth to flower.

Tr. pkt., 50c; ¼ oz., 85c; 1 oz., \$2.75.



Campanula Medium Calycanthema—Cup-and-Saucer type.

CAMPANULA

PYRAMIDALIS (Chimney Campanula). 250,000 s. 5 ft. Erect pyramidal habit.

Mixture. Tr. pkt., 25c; ¼ oz., 45c; 1 oz., \$1.50.

® **CARPATICA.** 350,000 s. 12 in. Dwarf perennial for rock gardens.

Blue. White. Mixture.

Each: Tr. pkt., 15c; ¼ oz., 25c; 1 oz., 85c.

MEDIUM SINGLE (Canterbury Bells). 135,000 s. 3 ft. Biennial, flowers second year from seed.

Blue. Lilac. Rose. White. Mixture.

Each: Tr. pkt., 15c; 1 oz., 40c.

MEDIUM CALYCANTHEMA. (Cup-and-Saucer Type.) 120,000 s. 3 ft. Biennial.

Dark Blue. Light Blue. Rose. White.

Each: Tr. pkt., 20c; ¼ oz., 40c; 1 oz., \$1.45.

Mixture. Tr. pkt., 20c; ¼ oz., 35c; 1 oz., \$1.25.

PERSICIFOLIA. 340,000 s. 30 in. Perennial. A very generally satisfactory perennial Campanula.

Alba. White. **Coerulea.** Blue. **Mixture.**

Each: Tr. pkt., 25c; ¼ oz., 50c; 1 oz., \$1.75.

CANDYTUFT, Perennial (See Iberis, page 27)

CARNATION

GRENADIN (Hardy Carnation). 14,000 s. 20 in. Good for cutting but needs winter protection. Flowers first year from an early sowing.

Pink. Red. Mixture.

Each: Tr. pkt., 35c; ¼ oz., 60c; 1 oz., \$2.00.

MISCELLANEOUS PERENNIALS — Continued

CATANANCHE

Coerulea. 16,000 s. 30 in. Everlasting light lavender-blue Centaurea-like flowers produced freely first year from seed. Nice for cutting.
Tr. pkt., 25c; ¼ oz., 40c; 1 oz., \$1.25.

CENTAUREA

Montano. 1600 s. 24 in. Large Cornflower-blue flowers for cutting.
Tr. pkt., 15c; 1 oz., 50c.
For Annual Centaurea (Cyanus, etc.), see page 19.

® CERASTIUM

42,000 s. Very satisfactory May-flowering, white edging and rockery plants. Silvery white foliage. Perfectly hardy.

***Tomentosum.** 10 to 12 in.

Tr. pkt., 25c; ¼ oz., 40c; 1 oz., \$1.25.

Columnae. 5 in. Dwarf, compact form of above.

Tr. pkt., 35c; ¼ oz., 75c.

CHEIRANTHUS (Wallflower)

19,000 s. 18 in.

Allioni (Siberian). Free-flowering brilliant orange.

Tr. pkt., 10c; 1 oz., 30c.

***Golden Bedder.** Large, deep golden yellow.

Tr. pkt., 15c; ¼ oz., 25c; 1 oz., 75c.

CHRYSANTHEMUM

Flowers freely in September and October. Perfectly hardy.

Japonicum. 77,000 s. Attractive, large flowered, double, and semi-double types. Tr. pkt., 50c; ¼ oz., \$1.00.

Korean Hybrids. 60,000 s. Single and semi-double types, autumn shades mixture. Largely October flowering.

Tr. pkt., \$1.00; ¼ oz., \$2.00.

COREOPSIS

GRANDIFLORA. 11,000 s. The two varieties listed are of the new large-flowered class and make fine cut flowers.

***Sunburst** (New Gold). A fine semi-double strain.

Tr. pkt., 20c; ¼ oz., 35c; 1 oz., 90c.

***Mayfield Giant.** Extra large deep golden yellow. Single.

Tr. pkt., 15c; ¼ oz., 25c; 1 oz., 65c.

DAISY

190,000 s. Following are listed in order of their flowering dates. Daisies make excellent cut flowers either grown outdoors, where they are perfectly hardy, or forced in frames or indoors.

Elder. Earliest flowering. Early June.
Tr. pkt., 15c; 1 oz., 75c.

***June Marguerite.** Very good variety. June.
Tr. pkt., 15c; 1 oz., 75c.

Spring Marguerite. June.

Tr. pkt., 15c; 1 oz., 75c.

***Mayfield Giant.** Quite large flowered. June.

Tr. pkt., 20c; 1 oz., 80c.

Alaska. The standard Shasta Daisy. July.

Tr. pkt., 20c; ¼ oz., 30c; 1 oz., \$1.00.

Double Fringed. Comes 50 per cent good double types that should be propagated by division.

Tr. pkt., 50c; 1/16 oz., 90c.

Conqueror. Giant late white. Late July.

Tr. pkt., 20c 1 oz.; 80c.

DELPHINIUM

100,000 s. For spring forcing, seed should be sown the previous spring and the field clumps brought in late in fall. When grown for summer cut flowers, Delphinium come cleaner under the protection of a cloth house. Require a well drained location, especially when wintered over outdoors. Undoubtedly one of the outstanding contributions to the Delphinium is the new Vetterle and Reinelt "Giant Pacific Hybrid" strain. Where fine Hybrid strains are wanted, these new varieties will be found outstanding.

***Lamartine.** Fairly deep, extra bright marine-blue — much deeper than the popular Belladonna. Very free-flowering and equally suited to indoor forcing or field conditions. Has smooth, mildew-resistant leaves. We are assured of an ample supply of seed this season and hope to take care of all orders received for this fine variety.

Tr. pkt., 50c; ¼ oz., \$2.25; 1 oz., \$8.00.

***Belladonna Improved.** A carefully reselected strain of this standard light blue variety.

Tr. pkt., 30c; ¼ oz., 50c; 1 oz., \$1.85; 1 lb., \$24.00.

Belladonna. The original or regular strain.

Tr. pkt., 25c; ¼ oz., 45c; 1 oz., \$1.60.

Bellamosum Improved. A reselected strain of this standard deep blue. Tr. pkt., 30c; ¼ oz., 50c; 1 oz., \$1.75; 1 lb., \$24.00.

Iceberg. A standard white variety. Giant Pacific Clear White is much superior. Tr. pkt., 40c; ¼ oz., \$1.20; 1 oz., \$4.00.

***Blackmore and Longdon Hybrids.** A fine free-flowering Hybrid strain for cutting.

Tr. pkt., 50c; ¼ oz., 90c; 1 oz., \$3.00; 4 ozs., \$9.00.

Wrexham or Hollyhock Strain. Noted for its extra large tapering spikes. Tr. pkt., 50c; ¼ oz., \$1.50; 1 oz., \$5.00.

Gold Medol Hybrids. Tr. pkt., 25c; ¼ oz., 45c; 1 oz., \$1.50.

GIANT PACIFIC HYBRIDS. (Vetterle & Reinelt.) Originator's strain. Definite points of superiority such as fully double flowers, a large degree of mildew resistance, and solid "whip-like" stems that don't snap easily, make this the fine Hybrid strain of the season.

***Blue Shades.** Light and dark shades mixed. The most popular mixture.

***Clear White.** By all odds the finest seed propagated white Delphinium. Fully double flowers and long spikes of clean, glistening white flowers. Tr. pkt. \$1.75; ¼ oz., \$3.00; ¼ oz., \$5.00; 1 oz., \$18.00.

(See next page for Lavender and Violet Shades and Mixture)



Specimens of the new Giant Pacific Hybrid strain



Coreopsis, Mayfield Giant

MISCELLANEOUS PERENNIALS — Continued

DELPHINIUM—Continued

Lavender Shades.

Violet Shades.

Each: Tr. pkt., \$1.25; 1/8 oz., \$2.00; 1/4 oz., \$3.50; 1 oz., \$12.00.

Mixture of above and many intermediate shades.

Tr. pkt., \$1.25; 1/8 oz., \$2.00; 1/4 oz., \$3.50; 1 oz., \$12.00.

For Delphinium Chinensis, see page 20.

DIANTHUS

28,000 s.

Laveliness. 20 in. Flowers late May. Highly fringed and curled petals. Large, freely produced, light lavender flowers. A very showy, perfectly hardy garden flower.

Tr. pkt., 50c; 1/16 oz., \$1.50.

® **Allwoodi Alpinus Mixed.** 8 to 10 in. Early June flowering. 1 1/2 in. single flowers in shades of pink and rose. Perfectly hardy with us.

Tr. pkt., 35c; 1/8 oz., \$1.00.

*® **Deltoides Erecta.** 6 in. Early June. A dwarf compact Maiden pink. Bright red and free flowering. Flowers second year from seed.

Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.50.

*® **Neglectus, Rose Cushion.** 6 in. Very attractive neat rock plant. Many small rose-pink flowers extending above a dense mat of foliage, end of May. Perfectly hardy with us.

Tr. pkt., 50c; 1/32 oz., \$1.00.

Plumarius, Single Mixture (Clove Pink). 20 in. Early flowering and sweet scented. Tr. pkt., 10c; 1 oz., 35c.

BARBATUS (Sweet William). 24 in. Early June. Perfectly hardy. Flowers second season.

* **Newpart Pink** (Pink Beauty). Our stock is a particularly deep, rich salmon-rose. A very attractive shade.

Tr. pkt., 15c; 1 oz., 50c.

* **Holbarn Glory.** A very attractive combination of deep crimson with white edge.

Tr. pkt., 15c; 1 oz., 50c.

Purple Beauty. Single bright deep purple.

Tr. pkt., 20c; 1/4 oz., 35c; 1 oz., \$1.00.

Scarlet Beauty. Well named.

Tr. pkt., 15c; 1/4 oz., 25c; 1 oz., 75c.

White.

Tr. pkt., 15c; 1 oz., 50c.

Single Mixture.

Tr. pkt., 15c; 1 oz., 50c.

Double Mixture.

Tr. pkt., 15c; 1 oz., 60c.

DICTAMNUS

Fraxinello (Gas Plant.) 1,700 s. 30 in. Pink with dark veins. Good border plant. Sow seed in the fall and allow to stand outdoors over winter for good germination.

Tr. pkt., 25c; 1/4 oz., 40c; 1 oz., \$1.35.

DIELYTRA (Dicentra)

Spectabilis (Bleeding Heart.) 1,600 s. 32 in. Sow seed in the fall and allow to stand outdoors over winter for good germination. Seedlings flower second season.

Tr. pkt., 50c; 1/4 oz., \$1.90; 1 oz., \$7.00.

DIGITALIS

GLOXINOIDES (Foxglove). 180,000 s. 4 ft.

Purple. Rose. White.

Giant Shirley Mixture.

Each: Tr. pkt., 15c; 1 oz., 50c.

DORONICUM (Leopard's Bane)

18,000 s. Attractive yellow Daisy-like flowers. Good long stems for cutting. Responds well to indoor forcing in spring.

* **Pordolionches, Bunch of Gold.** 30 in. Long-stemmed and extra free-flowering. Fine.

Tr. pkt., 75c. (Sold out, new crop November).

Caucasicum. 2 ft. The standard variety.

Tr. pkt., \$1.00; 1/16 oz., \$2.00.

ERYNGIUM

Burgoti. (New). 20 to 24 in. June flowering. An outstanding addition to this ornamental thistle group of Everlastings. In addition to the fact that it may be dried, its bright, steel-blue heads and deeply cut veined leaves are attractive. Tr. pkt., 50c.

EUPHORBIA

Carollota (Wild Baby's Breath). 8700 s. Large Gypsophila-like flowers, pure white and can be grown in very poor soil.

Tr. pkt., 35c; 1/4 oz., 85c; 1 oz., \$3.00.

GEUM

7000 s. 24 in. Fine for cutting as well as garden decoration.

Lady Stratheden. Double golden yellow.

Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.65.

Mrs. Brodshaw. Double glowing red.

Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.75.

GAILLARDIA

GRANDIFLORA. 9500 s. The strain listed below, although varying some in color, are all excellent cut flower sorts. Improved uniform stocks can be worked up by root division.

Burgundy. Deep shade of wine-red.

Tr. pkt., 25c; 1/4 oz., 60c; 1 oz., \$2.00.

* **Dazzler.** Golden yellow with red center. A fine standard variety.

Tr. pkt., 25c; 1/4 oz., 40c; 1 oz., \$1.35.

Maxima Aurea. Good deep golden yellow.

Tr. pkt., 25c; 1/4 oz., 40c; 1 oz., \$1.35.

The King. Large deep red flowers edged gold.

Tr. pkt., 30c; 1/4 oz., 60c; 1 oz., \$2.00.

* **Monarch Strain.** A distinctly superior mixture of large flowered types with a varied and bright color mixture.

Tr. pkt., 30c; 1/4 oz., 50c; 1 oz., \$1.75.

Oculata, New Hybrids. Mixture of pastel shades. Contains attractive original colors.

Tr. pkt., 35c; 1/4 oz., 60c; 1 oz., \$2.00.

Portolo Hybrids Mixed. Standard mixture.

Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.50.

* **Goblin.** New dwarf strain for decorative, bedding, and border work. 12 to 14 in. Forms very attractive compact plants.

Tr. pkt., 50c; 1/4 oz., 90c; 1 oz., \$3.00.

GYPSOPHILA

34,000 s. A planting of several varieties of hardy Gypsophila adds interesting and valuable variation to outdoor summer cutting material. Perfectly hardy.

* **Pacifico.** 42 in. Flower size of the old Paris Market annual variety. An attractive shade of bright pink. Nice.

Tr. pkt., 25c; 1/4 oz., 85c; 1 oz., \$3.00.

* **Oldhomiano.** 30 in. October flowering. Dense heads of feathery light rose-pink flowers. Nice effect. Flowers first season from early sowing.

Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.75.

PANICULATA. The regular white hardy Gypsophila.

Double Snow Flake. 40 in. An improved strain of double hardy Gypsophila. The double grafted varieties like Bristol Fairy are NOT available from seed.

Tr. pkt., 35c; 1/4 oz., \$1.00; 1 oz., \$3.85.

Single White.

Tr. pkt., 15c; 1 oz., 35c.

® **REPENS.** 6 in. Flowers late May. An attractive hardy rock garden subject.

White.

Tr. pkt., 25c; 1/4 oz., 45c; 1 oz., \$1.35.

Rose.

Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.75.

For annual Gypsophila, see page 20.



Doronicum Pardalianches — "Bunch of Gold"

MISCELLANEOUS PERENNIALS — Continued

® HELIANTHEMUM

Mutabile (Rock Rose). 15,000 s. 8 to 10 in. Dwarf and evergreen.
Tr. pkt., 20c; 1 oz., 80c.

HESPERIS

Matronalis (Sweet Rocket). 15,000 s. 3 to 4 ft. Red.
Tr. pkt., 10c; 1 oz., 25c.

® HEUCHERA

Sanguinea (Coral Bells). 750,000 s. 24 in. Crimson. An attractive garden plant with some value for cutting.
Tr. pkt., 50c; ¼ oz., \$1.25; 1 oz., \$4.50.

HOLLYHOCK

Imperator. 2700 s. Choice double mixture containing large fringed types. Tr. pkt., 25c; ¼ oz., 50c; 1 oz., \$1.60.

Allegheny Mixed. 2700 s. Single and semi-double types.
Tr. pkt., 15c; 1 oz., 50c.

CHATER'S DOUBLE. 3100 s. The standard double Hollyhock strain.

Chamois. **Deep Rose**. **Lilac Beauty**. **Newpart Pink**. **Scarlet**.
Sulphur-yellow. **White**. **Mixture**.

Each: Tr. pkt., 25c; ¼ oz., 40c; 1 oz., \$1.25.

® IBERIS (Candytuft)

11,500 s. Some very attractive rock garden subjects, perfectly hardy and early flowering.

Sempervirens. 12 in. Flowers end of May. White. Seedlings flower second season.

Tr. pkt., 25c; ¼ oz., 40c; 1 oz., \$1.50.

Gibraltarica. 12 in. Large flowered lilac.

Tr. pkt., 15c; ¼ oz., 25c; 1 oz., 75c.

For annual Candytuft, see page 19.

LATHYRUS

LATIFOLIUS (Hardy or Everlasting Sweet Pea). 550 s.

Pink Beauty. **White Pearl**. **Mixture**.

Each: Tr. pkt., 15c; 1 oz., 40c.

LAVANDULA

Vera (True Sweet Lavender). 32,000 s.

Tr. pkt., 15c; 1 oz., 50c.

® LEONTOPODIUM

Alpinum (Edelweiss). Attractive rock garden plant in cool climates. Must have a well exposed, cool, and well drained location. White.

Tr., pkt., 50c; 1/16 oz., \$1.00.

LIATRIS (Blazing Star)

Long, decorative rosy-purple spikes. Excellent cut flowers.

Pycnostachya. 9500 s. August flowering. 4 to 5 ft.

Tr. pkt., 25c; ¼ oz., 40c; 1 oz., \$1.50.

Scariosa. 3 to 4 ft. Some earlier flowering than the above.

Tr. pkt., 30c; ¼ oz., 75c; 1 oz., \$2.50.

Spicata. 9500 s. 2 ft.

Tr. pkt., 25c; ¼ oz., 60c; 1 oz., \$2.00.

LILIES FROM SEED

With the advent of the new White Queen Lily, this crop from seed assumes new commercial possibilities. Produces fine pot specimens, with flowers fully as large as Erabu, in 12 to 14 months from seed. Although not as even in flowering time as bulb stock, has the advantage of absolute freedom from disease and no bulb bills. For a supply of cut flowers a seed crop can't be beaten. They prefer raised beds, although protected frames produce a fine summer crop. They winter over with a heavy mulch protection and good drainage. A chapter in our “Red Book”, “Lilies from Seed”, treats fully our experience in handling this crop.

***White Queen**. 8200 s. The largest flowered PURE WHITE seed-propagated Lily we know of. A fine variety.

½ tr. pkt., 60c; tr. pkt., \$1.00; ⅙ oz., \$1.75; 1 oz., \$12.00.

Philippinense Formasanum, Giant Flowered. 8200 s. An improved form of the original stock of Philippine Lily.

Tr. pkt., 35c; ¼ oz., 75c; 1 oz., \$2.50.

Philippinense Formasanum Improved. The original Philippine Lily.

Tr. pkt., 25c; ¼ oz., 50c; 1 oz., \$1.75; 4 ozs., \$5.50.

Regale (Regal Lily). 6500 s. Pink with primrose-yellow center.

Tr. pkt., 15c; 1 oz., 50c.



A bed of our new White Queen Lily from seed in full flower.

LINUM

Perenne (Perennial Flax). 8500 s. Blue.

Tr. pkt., 15c; 1 oz., 40c.

LOBELIA

Cardinalis (Fulgens). 725,000 s. (Cardinal Flower.) 36 in.

Tr. pkt., 30c; ¼ oz., 85c.

LUNARIA

BIENNIS (Honesty or Money Plant). 1500 s.

White. **Crimson**. **Mixture**.

Each: Tr. pkt., 15c; 1 oz., 45c.

LUPINUS

POLYPHYLLUS (Hardy Lupine). Fine cutting material. Requires a well drained location.

The New Russell Strain. 1000 s. The features of this new strain, according to the originator's description, are: Extra large flowers on long, closely set spikes. Unusually wide range of colors with many shades never found in Hardy Lupines before. Although our trial planting has not flowered yet, we advise everyone interested in hardy perennials to become acquainted with this much advertised novelty strain. All authorities who have seen this strain flower declare it to be the outstanding hardy perennial novelty of the season.

12 seeds, 25c; 50 seeds, 65c; 120 seeds, \$1.25; 250 seeds, \$2.50

MISCELLANEOUS POLYPHYLLUS VARIETIES. 1450 s.

Rose.

Tr. pkt., 15c; 1 oz., 50c.

Dark Blue. **White**.

Each: Tr. pkt., 15c; 1 oz., 30c.

Luteus. Yellow.

Tr. pkt., 20c; ¼ oz., 30c; 1 oz., 90c.

Chocolate Saldier. Yellow shading to chocolate.

Tr. pkt., 35c; ¼ oz., 75c; 1 oz., \$2.50.

Harkness Regal Mixture. The standard fine hybrid mixture containing all colors in this class.

Tr. pkt., 15c; 1 oz., 50c; 4 ozs., \$1.75.

MISCELLANEOUS PERENNIALS — Continued



Ball *Matricaria* outdoors in July 90-95 per cent double. For the retail grower its value could be increased by spreading the crop through two sowings, 2-3 weeks apart. Sowing for above crop was made February 1st.

LYCHNIS 64,000 s.

- ® **Alpina.** Rose. 12 in. with compact growth. Nice dwarf rock garden plant.
Tr. pkt., 25c; 1/8 oz., 85c.
- Chalcedanica.** Scarlet. 36 in.
Tr. pkt., 15c; 1 oz., 50c.

MATRICARIA *Capensis* (Feverfew). 145,000 s.

***Ball Double White.** Since introducing this strain in the spring of 1934, demand for it has grown steadily as a standard greenhouse cut flower crop. Plants from a January or February sowing transplanted into the field in May or June will produce a nice crop in early fall. Also a late summer sowing will make a good crop the following spring. These same clumps can then be moved indoors in November for a spring greenhouse crop. Differs from ordinary cutting propagated strain in having smaller and more compact, completely double flowers that hold up much better, and in being some later flowering. Responds readily to additional lighting for earlier flowering.
1/2 tr. pkt., 30c; tr. pkt., 50c; 1/8 oz., \$1.00; 1/4 oz., \$1.75.

Double Golden Ball. 10 in. outdoors. Dwarf, semi-double.
Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.75.

® **MYOSOTIS** (Forget-me-not). 42,000 s.

- Palustris.** True Marsh Forget-me-not. Blue.
Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.75.
- ***Blue Bird** (Oblongata). Standard deep blue Forget-me-not. 12 in.
Tr. pkt., 30c; 1/4 oz., 75c; 1 oz., \$2.75.
- ALPESTRIS.** Biennial.
- ***Royal Blue** (Stricta Grandiflora). Compact, upright habit. Deep rich blue.
Tr. pkt., 20c; 1/4 oz., 40c; 1 oz., \$1.35.
- Pink Bauquet.** Same as above but a medium deep pink shade.
Tr. pkt., 25c; 1/4 oz., 60c; 1 oz., \$2.00.
- Blue Basket.** 12 in. Deep blue. More spreading habit than above varieties.
Tr. pkt., 25c; 1/4 oz., 60c; 1 oz., \$2.00.
- Alba.** 12 in. Spreading habit. White.
Tr. pkt., 20c; 1 oz., 60c.

For other Myosotis including our BALL EARLY, see page 21.

® **NEPETA**

Mussini. 52,000 s. 12 in. Light blue. June flowering.
Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.75.

PHLOX

Decussata Hybrid Mixture. 2500 s. 3 ft. Our strain contains many new large flowered, brilliantly colored types.
Tr. pkt., 25c; 1/4 oz., 45c; 1 oz., \$1.60.

PHYSALIS

Francheti. (Chinese Lantern Plant). 18,000 s. Large orange berries.
Tr. pkt., 15c; 1 oz., 60c.

PHYSOSTEGIA

Virginica. 16,000 s. 4 ft. Rosy lilac.
Tr. pkt., 25c; 1/4 oz., 40c; 1 oz., \$1.50.

PLATYCODON

GRANDIFLORUM (Tufted Harebell or Balloon Flower). 28,000 s. 24 in.

White. **Blue.** A clear deep violet-blue.
Each: Tr. pkt., 15c; 1/4 oz., 25c; 1 oz., 75c.

POPPY (Orientale). 140,000 s.

Although not suited to shipping, Oriental Poppies are unsurpassed for brilliant colors. If cut in the bud stage, they last several days in water. Prefer a well-drained location. Sow seed in pots and transplant into the field when small so as not to disturb the roots.

***Olympia.** A seed produced strain of this orange-scarlet, perfectly hardy variety. 40 to 50 per cent semi-double.
Tr. pkt., 60c.

Beauty of Livermere. Dark oxblood-red.
Tr. pkt., 25c; 1/4 oz., 60c; 1 oz., \$2.25.

Brilliant. 40 in. Vivid, fiery red.
Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.75.

Mrs. Perry. Fine salmon-rose.
Tr. pkt., 35c; 1/8 oz., 60c; 1/4 oz., \$1.00.

Perry's White. 24 in.
Tr. pkt., 35c; 1/8 oz., \$1.00.

Mixture of all colors in this class.
Tr. pkt., 20c; 1/4 oz., 35c; 1 oz., \$1.25.

PRIMULA

Vulgaris (True Yellow English Primrose). 19,000 s. 6 in. Sow seed in the fall and allow to stand outdoors over winter for good germination.
Tr. pkt., 35c; 1/4 oz., 80c; 1 oz., \$2.85.

Bul'esiana Hybrids. 130,000 s. 18 in. Bright mixture of yellow, orange, apricot, and carmine shades. Seed of irregular germination. Tr. pkt., 35c; 1/4 oz., 80c; 1 oz., \$2.85.
Tr. pkt., 50c; 1/8 oz., \$1.15.

VERIS. 33,000 s. Especially the new tall, large flowered Colossea has proven the usefulness of this class as spring pot plants and fine subjects for combinations since they can be moved without harm during their flowering season. Plants lifted from outdoors in the fall will make specimen pot plants from February and March on. Also make fine hardy border plants if given partial shade.

***Calassea.** Our trials of this new strain show a real improvement in flower size, new bright colors, and strong growth. Should be used.
Tr. pkt., 75c.

***Kleyni.** A particularly valuable hardy Primula because of extra long-stemmed and large flower heads. Easily forced in spring. Golden yellow to apricot.
100 seeds, 40c; 250 seeds, 85c; 1000 seeds, \$3.00.

***Giant Munstead Strain.** The standard strain for bedding. Not as tall as the above strains. Shades of yellow.
Tr. pkt., 50c; 1/4 oz., \$1.15.

Polyanthus Mixture. Unwin's Strain. 12 in.
Tr. pkt., 25c; 1/4 oz., 60c; 1 oz., \$2.15.

For Other Primulas, see page 16.

MISCELLANEOUS PERENNIALS — Continued

PYRETHRUM

Parmicaeflorum. 340,000 s. 5 in. Very dwarf finely feathered silvery white foliage. Must be sown in February for spring sales. Tr. pkt., 35c; 1/8 oz., \$1.15.

Parthenifolium Aurea, Excelsior. 325,000 s. 3 in. Same as above but foliage distinctly yellow-green and decidedly more dwarf. Tr. pkt., 35c; 1/8 oz., \$1.00.

Uliginasum. 62,000 s. 3 ft. Single white Daisy-like flowers. Tr. pkt., 35c; 1/4 oz., 90c; 1 oz., \$3.25.

ROSEUM (Painted Daisy). 18,000 s. The standard hardy cut flower class.

***Semi-double Mixture.** An excellent strain that requires two-year-old clumps to produce its fully double flowers. Tr. pkt., 50c; 1/4 oz., \$1.00; 1 oz., \$3.50.

***Kelway's Strain.** Dark red. Fine cut flower variety. Tr. pkt., 35c; 1/4 oz., 85c; 1 oz., \$2.85.

Single Mixture. (Robertson's Strain). Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.85.

RUDBECKIA

Purpurea (Echinacea). 7000 s. 4 ft. Tr. pkt., 25c; 1/4 oz., 40c; 1 oz., \$1.50.

SALVIA

Patens. 3800 s. 30 in. Navy blue. Tr. pkt., 25c; 1/4 oz., 65c; 1 oz., \$2.25.

® SAPONARIA

Ocymoides. 5500 s. 12 in. Rose. Trailing. Tr. pkt., 20c; 1 oz., 60c.

SCABIOSA

2400 s. Excellent perennial cut flower material. Larger flowered than the popular annual form, perfectly hardy, and early flowering. Germination of seed sometimes irregular.

Calumbaria Lavender. Delicate color.

Calumbaria Pink. Orchid-pink.

Caucasica Lilac-Lavender.

Each: Tr. pkt., 25c; 1/4 oz., 60c; 1 oz., \$2.00.

***Caucasica, House Hybrids.** Shades of lavender and blue. Use this strain if you want a small bed of hardy Scabiosa for cutting. Tr. pkt., 35c; 1/4 oz., 85c; 1 oz., \$3.00.

® SEDUM

700,000 s. Fine perfectly hardy rock garden subjects.

***Acre.** 3 in. A very nice extra dwarf evergreen. Small light yellow flowers account for its common name—Golden Moss. Very strong, hardy grower. Tr. pkt., 25c; 1/8 oz., 80c.

Aizoon. 4 in. Attractive dwarf form, bright yellow with contrasting reddish brown foliage. Tr. pkt., 50c; 1/8 oz., \$1.35.

Kamtschaticum. 6 to 8 in. Very nice rock garden plant. Yellow. Tr. pkt., 50c; 1/8 oz., \$1.50.

Reflexum, Chamelean. Growth starts green, gradually turning buff or light brown shades as season advances. Bright yellow flowers in midsummer. 8 to 10 in. in fall. Tr. pkt., 50c.

***Spurium Coccineum, Bronze Carpet.** 4 in. Attractive deep bronze foliage with rose flowers. Tr. pkt., 35c.

SEMPERVIVUM (House Leek)

Perennial Mixture. 325,000 s. Tr. pkt., 35c; 1/16 oz., \$1.25.

® SPERGULA

Pilifera. Rounded compact hard growth; plants covered with small white flowers in June. Attractive for planting between stones or for borders. Tr. pkt., 50c; 1/16 oz., \$1.50.

STOKESIA

Cyanea. 3300 s. 16 in. Blue. Tr. pkt., 20c; 1/4 oz., 40c; 1 oz., \$1.25.

THALICTRUM

Dipterocarpum. 12,000 s. 3 to 4 ft. Early June flowering. Graceful tall plant with fine textured foliage. Rosy purple clusters of flowers are good for cutting or garden decoration. Seedlings flower second season with us. Tr. pkt., 25c; 1/4 oz., 45c; 1 oz., \$1.50.

STATICE

Perennial Statice are very hardy, make good cut flower material, and some of them as noted, can be successfully dried.

Caspia. 175,000 s. 30 in. Seedlings flower second season; lilac. Tr. pkt., 35c; 1/4 oz., 60c; 1 oz., \$2.25.

Dumasa. 19,000 s. 18 in. Dense clumps of silvery gray flowers. Seedlings flower second season. Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.65.

Incana (Tatarica). 13,000 s. 14 in. Small white flowers that may be dried. Tr. pkt., 15c; 1 oz., 65c.

***Latifolia** (Sea Lavender). 40,000 s. 30 in. Standard blue perennial statice. Used extensively dried. Very hardy and flowers second season from seed. Tr. pkt., 20c; 1/4 oz., 40c; 1 oz., \$1.35.

***Perezi.** 14,000 s. Flowers in large lavender heads first year from seed, but not hardy with us. Tr. pkt., 25c; 1/4 oz., 40c; 1 oz., \$1.50.

Puberula. 5200 s. 8 to 10 in. A dwarf form with flower heads similar to *S. latifolia*. Flowers some first season. Tr. pkt., 25c; 1/4 oz., 60c; 1 oz., \$2.25. For Annual Statice, see page 22.

TRITOMA

Mirabilis Hybrids. 20,000 s. Yellow shades but varies. Tr. pkt., 25c; 1/4 oz., 50c; 1 oz., \$1.75.

TROLLIUS

LEDEBOURI (Globoseflower). 8000 s. Sow seed in fall and allow to stand outdoors over winter for good germination.

Golden Queen. 3 to 4 ft. A fine early, large deep orange variety.

Orange. 24 in. Each: Tr. pkt., 50c; 1/4 oz., \$1.50.

® TUNICA

Saxifraga. 150,000 s. 8 to 10 in. Small rosy lilac flowers produced first season from seed. Tr. pkt., 15c; 1 oz., 60c.

VALERIANA

Rubra. 13,000 s. 36 in. Deep crimson. Good for cutting. Tr. pkt., 15c; 1 oz., 60c.

VERONICA 350,000 s.

Langifolia. 30 in. Compact clusters of blue flowers. Tr. pkt., 25c; 1/4 oz., 40c; 1 oz., \$1.35.

***Repens.** 3 in. Very dwarf trailing. Early flowering. White with light blue. Tr. pkt., 25c; 1/4 oz., 60c; 1 oz., \$2.25.



Veronica Longifolia

VEGETABLE SEED for FLORISTS

	1 oz.	4 ozs.	1 lb.
BEET			
Crosby's Egyptian. (Original Strain.) 50 days. Extra early for home and market gardeners. Globe-shaped. Dark purplish red, crisp and tender, excellent quality	\$0.10	\$0.30	\$1.00
Detrait Dark Red. (Improved Strain.) 55 days. Standard for home and market garden. Uniform globe-shaped. Blood-red, tender until full grown	.10	.35	1.00
CARROT			
Chontenoy. Fine all-purpose variety for home and market garden and shipping. Dependably heavy yielder. Good for winter storage. 70 days	.15	.40	1.25
Donvers Half-Lang. Very productive and uniform. Bright orange—much used for shipping. 75 days	.20	.60	1.75
CAULIFLOWER			
Donish Giont, Dry Weather. Most dependable, large fine heads. 65 days	1/4 oz., 75c; 1/2 oz., \$1.25	2.10	
Early Snowball. Best early greenhouse-forcing variety. medium pure white heads, good shipper. The standard of excellence. 52 days	1/4 oz., 65c; 1/2 oz., \$1.25	2.00	
CELERY			
Golden Plume or Wonderful. Better and earlier than Golden Self-Blanching, a leader for market gardening and shipping	1/4 oz., 35c; 1/2 oz., 60c	1.10	
Golden Yellow Self-Blanching Dwarf. Standard market and shipping sort	1/4 oz., 20c; 1/2 oz., 35c	.55	
CELERIAC			
Large Smooth Progue. Turnip-rooted celery. Fairly smooth, stalks hollow; keeps until late winter	.30	.90	
EGGPLANT			
Block Beauty. Popular home and market variety. Rich dark purple	.45	1.40	
Improved Large Purple. (Spineless.) The standard home and market sort; early, good producer	.45	1.40	
KALE			
Dwarf Green Curled. Very hardy, 12 to 15 inches tall, 30-inch spread. Finely curled	.15	.35	
KOHL-RABI			
Early White Vienno. Standard sort for forcing and home garden. Globe-shaped. 60 days outdoors	.20	.50	
LETTUCE			
All-Season Head. Valuable market and home garden variety; round, firm heads	.15	.45	1.40
Big Boston. Select stock. Most widely popular of all heading Lettuce. Largely used for summer and fall hotbed and cold frame culture. Cabbage butter-head type, excellent quality	.15	.40	1.30
Black-Seeded Simpson. Early, dependable everywhere and largely used by home and market gardeners. Loose-leaved and frilled. Grows quickly; fine quality	.15	.40	1.15
Grand Rapids Forcing. The standard loose-leaved variety for greenhouse forcing. Tender and sweet under glass. Best early market variety	.15	.50	1.60
Mommath Block Seeded Butter. Fine butter heading variety for home and market, especially good for summer. Head large and firm; excellent quality and flavor	.15	.45	1.40
New York Special No. 12. Early, sure heading and does well in midsummer. Very popular for shipping	.15	.50	1.75
ONION			
Prizetoker. Large, globular; yellow, good shipper and keeper, flesh coarse and mild	.30	.90	
Yellow Globe Danvers. Very popular; medium large; globe-shaped; flesh white with tinge of yellow, firm and hard; excellent keeper	.25	.75	
PARSLEY			
Extra Triple Curled (Moss Curled). Very compact. Dark green; finely cut and closely curled	.15	.35	
Poromaunt. New and improved triple curled variety, unusually rich dark green foliage tightly curled. Finest variety for home or market gardeners	.20	.70	
RADISH			
Early Scarlet Globe. (Short Top Strain.) Our strain of this very early forcing variety is a superior one; small tops make it right for bunching. 23 days. This is an ideal florists' "catch crop" for selling to local stores	.10	.30	.90
Iceberg. 27 days. Best early standard white Radish for home and market gardens. Roots long, very white and brittle; mild and good flavor	.10	.30	.90
Scarlet Turnip. White-tipped popular variety for home and market gardens. Tops small, roots deep, turnip-shaped, bright scarlet; fine quality	.10	.25	.75
SPINACH			
Giont Thick-Leaved (Nobel). 43 days. Best of thick-leaved group; long standing; heavy yielder; deep green, smooth leaves	.15	.40	
New Zealand. Distinctly valuable for hot, dry weather; seeds are large, nut-like; plants large and spreading; leaves small, thick, deep green and tender	.10	.25	.60
SWISS CHARD			
Lucullus. Deep green, fleshy, crumpled leaves, choice for greens—most popular variety	.15	.35	
TURNIP			
Purple-Top White Globe	.10	.20	.50

BALL RESISTANT ASTERS

The following varieties are, we believe, the best available in the new Rot-Resistant class.

12 BEST ROT-RESISTANT ASTERS

Prices on all Rot-Resistant Strains, except the varieties priced differently, are as follows: Tr. pkt., 35c; ¼ oz., 50c; 1 oz., \$1.75.

Our 12 Best list is based, not only on our experience with them as market growers, but also on demand for them from all sections. They are listed in order of their value on the above basis. Dates are for flowering in our latitude.

Boll Deep Rose. Bright shade of deep rose; attractive incurved flower form. Aug. 20 to Sept. 1. **Sold out; new seed ready in November.**

Boll White Lote. Typical American Branching type and habit; long-stemmed, large and fully double. Sept. 10 to 15.

Boll Deep Purple. An attractive bright deep purple; good stem. Aug. 20 to Sept. 1.

Branching Azure Blue. Clear mid-blue or bright lavender-blue. Sept. 15 to 20.

Boll Phlox Pink. Fairly light rose-pink; an especially attractive cut flower shade. Sept. 5 to 10.

Boll White Early. A choice early white that immediately follows the Royals. Sept. 5 to 10.

Royal White. Excellent fairly early commercial white. Aug. 25 to Sept. 1.

Royal Azure Blue. Same color as Branching Azure Blue; a good market variety. Sept. 5 to 10.

Royal Shell-Pink. Bright shade of Semple or shell-pink; extra large flowers. Sept. 1 to 5. **Sold out; new seed ready in November.**

Queen of the Market Mid-Blue. A very good early mid-blue; valuable for early flowering. July 15.

Queen of the Market White. The earliest good white cut flower variety. July 15.

American Beauty Silvery Rose. Fairly deep pleasing rose; fine large flowers and long stems. Sept. 15 to 20.

Twelve Best Mixture. Mixture of above varieties that will provide a succession of flowers from July to late September.

LIST OF STANDARD RESISTANT VARIETIES

The 12 Best Not Included

QUEEN OF THE MARKET. Most popular early flowering class; flower in late July.

Crimson. Some lighter and brighter than true crimson.

Dork Blue. Rich shade of purple; highly resistant.

Flesh Pink. Light or bluish pink.

Scorlet. Rather heavy for cutting.

ROYALS. A very popular and much used class because of early flowering date, together with excellent size and stems. Around Sept. 1.

Purple. Bright purple.

AMERICAN COMETS. We group all the interlaced or fluffy petaled Cregos and Comets under this heading because they are all of the same general type.

Comet Blush Pink. Light or blush pink; valuable for earliness. Aug. 25.

Comet Cottlejo. Very pleasing orchid-lavender.

Tr. pkt., 40c; ¼ oz., 70c; 1 oz., \$2.50.

Comet Light Blue. Azure-blue; good for cutting. Early Sept.

Comet Rose. Fine large flowers; a desirable deep rose shade.

Comet White. Fine large early white.

Crego Enchontress. Attractive light rose tinged salmon; an interesting new color. Early September. **Sold out; new seed ready November.**

Tr. pkt., 40c; ¼ oz., 70c; 1 oz., \$2.50.

Crego Azure Blue. An excellent clear blue for cut flowers; Cregos, being long stemmed and larger flowered are generally preferred in this group. Sept. 10 to 15.

Crego Blue Flame. Fairly deep bright blue. Sept. 5 to 10.

Crego Deep Rose. Fairly deep rose. Sept. 10 to 15.

Crego Orchid. Delightful orchid-lavender shade. Sept. 5 to 10.

Crego Peachblossom. Delicate light rose deepening to bright pink. Sept. 10 to 15.

Crego Shell-Pink. Bright clear pink. Sept. 10 to 15.

Crego White. Fine pure white.

Ostrich Feather Peachblossom. Delicate rose, deepening as flowers open.

UPRIGHT BRANCHING. Distinctive for strong upright growth.

Peachblossom. Lavender-rose-pink. Sept. 10 to 15.

Purple. A strong dark purple. Sept. 10 to 15.

White. Large full double flowers. Sept. 10 to 15.

AMERICAN BRANCHING. Midseason varieties of strong, long-stemmed growth with large flowers.

Deep Rose. Long-stemmed deep rose. Sept. 15 to 20.

Purple. Rich purple; highly resistant. Sept. 10 to 15.

Semple Pink. (Ball.) Choice shell-pink. Sept. 10 to 15.

White. True branching type; excellent. Sept. 10 to 15.

KING. Attractively pointed or quilled petals give flowers of this class a quite distinctive appearance.

Crimson. Bright crimson; upright habit. Sept. 10 to 15.

Peachblossom. Delicate rose deepening to bright pink. Upright. Sept. 10 to 15.

AMERICAN BEAUTY. Valuable and popular because of large long-stemmed, attractively incurved flowers.

Azure Fairy. Trifle darker than Branching Azure Blue. Sept. 20 to 25.

Crimson. Long-stemmed good crimson. Sept. 15 to 20.

Deep Rose. Finest rich deep rose. Sept. 15 to 20.

Purple Prince. Bright marine purple. Sept. 15 to 20.

Shell-Pink (September Beauty). Delicate pink; excellent. Sept. 25 to Oct. 1.

White. Long-stemmed fine white. Sept. 25 to Oct. 1.

Prices on all Rot-Resistant Strains, except the varieties priced differently, are as follows: Tr. pkt., 35c; ¼ oz., 50c; 1 oz., \$1.75.

RESISTANT STRAINS IN MIXTURE

Queen of the Market Mixture.

Royal Mixture.

Crego Mixture.

King Mixture.

American Branching Mixture.

American Beauty Mixture.

Prices on above MIXTURES ONLY: Tr. pkt., 30c; ¼ oz., 40c; 1 oz., \$1.50.

All Varieties Mixed. Mixture of above varieties, largely used for growing plants to sell from flats to home gardeners.

Tr. pkt., 20c; ¼ oz., 30c; 1 oz., \$1.00; 1 lb., \$12.00; 4 ozs. at lb. rate.

VARIOUS RESISTANT ASTERS

Colifornio Giant Dork Purple. Rich color and highly resistant. Tr. pkt., 50c; ¼ oz., 75c; 1 oz., \$2.50.

SINGLE VARIETIES. (Ball.) A new strain of strong growing, rot-resistant singles that should be found of value for any cut flower work. Long-stemmed and exceptionally resistant to stem rot. Flower in mid-September.

Deep Rose. Strong deep rose-pink.

Deep Solmon-Rose. Strong bright color. **Sold out; new seed ready November.**

Light Blue. Medium shade of light blue. **Sold out; new seed ready November.**

White. Clear white; extra free growth.

Mixed. The four colors mixed.

Prices on Single Asters: Tr. pkt., 40c; ¼ oz., 60c; 1 oz., \$2.00.

Aurora Golden Sheof. Cushioned center type; center petals quilled with broad outer petals. Pleasing light yellow. Sept. 15 to 20.

Tr. pkt., 35c; ¼ oz., 50c; 1 oz., \$1.75.

Heart of France. Rich scarlet. Sept. 10 to 15.

Tr. pkt., 35c; ¼ oz., 50c; 1 oz., \$1.75.

Solmon-Rose Shodes. (Ball.) Attractive mixture of light to deep salmon-rose shades. Valuable for retail grower. Sept. 5 to 10.

Tr. pkt., 40c; ¼ oz., 60c.

EXCELLENT PETUNIAS

DWARF GIANTS IN MIXTURES

(Continued from opposite page)

- No. 3—Giants of California, Medium Dwarf.** Same true Giant strain as our No. 2 except growth is somewhat taller.
Tr. pkt., 75c; 1/64 oz., \$1.50; 1/32 oz., \$2.75; 1/16 oz., \$4.50.
- No. 4—Giants of California, Medium Dwarf, Light Shades.** Same as No. 3 except that shades are lighter.
Tr. pkt., 75c; 1/64 oz., \$1.50; 1/32 oz., \$2.75; 1/16 oz., \$4.50.
- No. 5—Giants of California.** Strictly Giants of tall habit.
Tr. pkt., 50c; 1/64 oz., \$1.00; 1/32 oz., \$1.50; 1/16 oz., \$2.50.
- No. 6—Dwarf Giants, Eriksson's Strain.** Carefully selected strain of greenhouse grown Giants. Tr. pkt., \$1.25.

VARIOUS DOUBLE STRAINS

(See opposite page for All-Double Petunias)

- Double Fringed Madonna.** Double fringed white; an excellent strain.
½ tr. pkt., 75c; tr. pkt., \$1.50.
- Double Shepherd's Pride.** Choice salmon or shrimp-pink.
½ tr. pkt., 75c; tr. pkt., \$1.50.
- *Double Rosy Morn.** (Carnation-Flowered). Small bright rose; about 55 per cent true dwarf double; choice.
Tr. pkt. (1000 seeds), \$1.00; 1/64 oz., \$1.75.

CALIFORNIA GIANTS IN SEPARATE COLORS

Same large flowers and open throat as the California Giants in mixtures.

- *Salmon Beauty.** Nice salmon-pink.
Tr. pkt., 75c; 1/64 oz., \$1.50; 1/32 oz., \$2.50.
- *Silvery Rose.** Light silvery rose.
Tr. pkt., 75c; 1/64 oz., \$1.50; 1/32 oz., \$2.50.
- *Copper Red, Dark.** Coppery crimson.
Tr. pkt., 75c; 1/64 oz., \$1.25; 1/32 oz., \$2.25.
- Copper Red, Light.** Rich old rose.
Tr. pkt., 75c; 1/64 oz., \$1.25; 1/32 oz., \$2.25.
- German Empress.** Bluish white, dark throat.
Tr. pkt., 50c; 1/64 oz., \$1.25.
- *Robin Hood.** Rich deep rose, dark throat.
Tr. pkt., 75c; 1/64 oz., \$1.50.
- Prince of Wuertemberg.** Deep rose, dark throat.
Tr. pkt., 50c; 1/64 oz., \$1.15; 1/32 oz., \$2.20.
- Princess of Wuertemberg.** Bright rose-pink with veined throat.
Tr. pkt., 50c; 1/64 oz., \$1.25; 1/32 oz., \$2.25.
- Rheingold.** White, yellow throat.
Tr. pkt., 50c; 1/64 oz., \$1.15; 1/32 oz., \$2.20.

DWARF ERFURTS (Grandiflora Fringed)

Extra compact, flowers heavily fringed. Ideal for pots.

- *Colorado Sunset.** (New). Uniformly dwarf, heavily fringed, bright rose-pink; comes fully 90 per cent true to type.
In 1000-seed trade packets only, 75c.
- *Setting Sun.** Brilliant rose; ideal pot plant habit.
Tr. pkt., 50c; 1/64 oz., \$1.50; 1/32 oz., \$2.50.
- *Gaiety.** Finely fringed pink and white.
Tr. pkt., 50c; 1/64 oz., \$1.25; 1/32 oz., \$2.00.
- *Lace Veil.** Richly fringed dwarf white.
Tr. pkt., 50c; 1/64 oz., \$1.50; 1/32 oz., \$2.50.
- Gottfried Michaelis.** Rich amaranth-red. Tr. pkt., 50c.
- Dainty Lady.** Good dark cream. Tr. pkt., 50c; 1/64 oz., \$1.75.

GRANDIFLORA (Single Fringed)

Heavily fringed, and while not quite so dwarf as the Dwarf Erfurts, enough so to be nice for bedding or pots.

- Appleblossom.** Pleasing light shell-pink. Tr. pkt., 50c; 1/64 oz., \$1.25.
- Aurora.** Attractive light rose, veined purple-rose.
Tr. pkt., 50c; 1/64 oz., \$1.25.
- Columbia.** Of distinctive upright growth; pleasing pink and white combination. Tr. pkt., 50c; 1/64 oz., \$1.50.
- *Golden Jubilee.** (Benary). Striking bright carmine-scarlet; deeply fringed. Tr. pkt. (originator's seed), 75c.
- *Maculata.** Large rose and white flowers; very attractive.
Tr. pkt., 50c; 1/64 oz., \$1.25; 1/32 oz., \$2.25.
- Pepita.** Irregularly colored carmine and white. Tr. pkt., 50c.
- *Pink Triumph.** Brightly colored rose-pink. Tr. pkt., 50c; 1/32 oz., \$1.10.
- Pride of Portland.** Large clear rose-pink; well fringed.
Tr. pkt., 50c; 1/64 oz., 75c; 1/32 oz., \$1.25.
- Romany Lass.** Richly fringed crimson-rose.
Tr. pkt., 50c; 1/64 oz., \$1.25; 1/32 oz., \$2.00.

- *Fringed Royal Purple.** (Marine.) Rich velvety purple; finest in this class. Tr. pkt., 75c; 1/64 oz., \$1.50; 1/32 oz., \$2.75.
- Theodosia.** Well known rose-pink with gold throat.
Tr. pkt., 50c; 1/64 oz., \$1.00; 1/32 oz., \$1.75.
- White Beauty.** Finely fringed clear white; good strong growth for outdoors. Tr. pkt., 50c; 1/64 oz., 75c; 1/32 oz., \$1.25.
- Ball Single Fringed No. 1.** Strong, extra free-flowering growth that does particularly well outdoors even where temperatures are high. Medium height and extra showy, free flowering habit.
Tr. pkt., 50c; 1/32 oz., \$1.00; 1/16 oz., \$1.75; ½ oz., \$2.75; ¼ oz., \$5.00.
- Ball Single Fringed No. 3.** Somewhat more compact than our No. 1.
Tr. pkt., 50c; 1/32 oz., \$1.00; 1/16 oz., \$1.75; ½ oz., \$2.75; ¼ oz., \$5.00.
- Fluffy Ruffles.** Distinctive for extra heavy fringe; colors fairly dark.
Tr. pkt., 50c; 1/32 oz., \$1.25; ½ oz., \$3.75.

GRANDIFLORA (Ruffled and Plain Edged)

- *White Queen.** (Ball.) An extra large ruffled clear white; fine for bedding or pots. Tr. pkt., 75c; 1/64 oz., \$1.75.
- *Elk's Pride, Dwarf.** (Ball.) Clearly dwarfier than the original stock and more valuable for bedding.
Tr. pkt., 50c; 1/64 oz., \$1.00; 1/32 oz., \$1.75.
- Balcony Queen.** Irregularly marked purple and white.
Tr. pkt., 50c; 1/64 oz., 90c; 1/32 oz., \$1.60.
- Berolino.** Nicely ruffled large-flowered purplish violet.
Tr. pkt., 75c; 1/64 oz., \$1.25.
- Brilliant Rose.** Very effective bright rose. Tr. pkt., 50c; 1/64 oz., \$1.50.
- Burgundy.** (New.) Striking Burgundy red with white throat; strong growth. Tr. pkt., 50c; 1/32 oz., \$1.25.
- Dwarf Carmine Glory.** (New.) Deep bright carmine-pink; dwarfier and deeper color than regular Pink Glory. Tr. pkt., 75c; 1/64 oz., \$1.50.
- Dwarf Pink Glory.** Perfect dwarf habit with flowers of glowing deep rose.
Tr. pkt., 50c; 1/64 oz., \$1.00; 1/32 oz., \$1.75.
- Elk's Pride Improved.** Reselected stock; an improvement in uniform size.
Tr. pkt., 50c; 1/64 oz., \$1.00; 1/32 oz., \$1.75.
- Giant Steel Blue.** Light bluish white with dark veins.
Tr. pkt., 50c; 1/32 oz., \$1.25.
- Queen of the Market.** Bright deep carmine. Tr. pkt., 50c; 1/64 oz., \$1.25.
- *White Cloud.** A fine all-purpose white Petunia.
Tr. pkt., 50c; 1/64 oz., \$1.00; 1/32 oz., \$1.60; 1/16 oz., \$2.75; ½ oz., \$4.75.
- *Silver Seam (Purple Robe).** Bright purple with interesting silver edging of petals; fine as a pot plant. Tr. pkt., 50c; 1/64 oz., \$1.25.

DWARF HYBRIDA

Most popular and valuable class for bedding; dwarf and free flowering.

- *Black Prince.** Velvety crimson-red of Balcony habit.
Tr. pkt., 35c; 1/16 oz., 60c; ¼ oz., \$1.00.
- *Celestial Rose.** Most popular deep rose for dwarf habit and deep rose color.
Tr. pkt., 35c; ¼ oz., 75c; ½ oz., \$1.25; 1 oz., \$4.00; 2 ozs., \$7.00.
- *Celestial Rose Improved.** Improves above in being more compact and truer to type. Tr. pkt., 50c; ½ oz., \$1.50.
- Blue Perfection.** Medium shade of dark blue.
Tr. pkt., 35c; ¼ oz., \$1.00; 1 oz., \$3.75.
- Cockatoo.** Violet-blue marked white.
Tr. pkt., 35c; ½ oz., 75c; ¾ oz., \$1.25.
- Commander.** White star on bright crimson.
Tr. pkt., 35c; 1/16 oz., 60c; ¾ oz., \$1.00.
- Heavenly Blue.** Reselected medium to light blue.
Tr. pkt., 50c; ½ oz., \$1.00; ¾ oz., \$1.75; 1 oz., \$6.50.
- Normo.** Violet-blue with white star.
Tr. pkt., 25c; ¼ oz., 50c; 1 oz., \$1.50.
- Rose of Heaven.** Well known rose-pink.
Tr. pkt., 25c; ¼ oz., 50c; 1 oz., \$1.75.
- Rosy Morn.** Fairly deep rose with white throat.
Tr. pkt., 35c; ¼ oz., 75c; 1 oz., \$2.50.
- Senator.** Violet; white throat. Tr. pkt., 35c; ¼ oz., 75c; 1 oz., \$2.50.
- Snow Queen.** Fine uniform white for bedding.
Tr. pkt., 25c; ¼ oz., 40c; 1 oz., \$1.50.
- Twinkles.** Small-flowered bright rose-starred white.
Tr. pkt., 35c; ½ oz., 85c; ¾ oz., \$1.50; 1 oz., \$5.00.
- Violocea.** Dwarf rich violet. Tr. pkt., 25c; ¼ oz., 40c; 1 oz., \$1.50.
- Dwarf Hybrid Mixed.** All colors. Tr. pkt., 25c; ¼ oz., 50; 1 oz., \$1.75.

VARIOUS TYPES

- *Admiral.** A really dwarf bright blue ruffled Petunia; 6 to 8 inches high with practically no rogues. Originator's stock and very fine for outdoor bedding or pots. Tr. pkt., 75c; 1/32 oz., \$1.75; 1/16 oz., \$3.00.
- Morpha Washington.** Extra dwarf spreading growth; ideal for bedding; German Empress color. Tr. pkt., 50c; 1/32 oz., \$1.50.
- Rose Gem.** Extra small flowers freely produced on dwarf well-rounded plants. Clear deep rose-pink. Tr. pkt., 35c; ½ oz., \$1.00.

ALL DOUBLE

PETUNIAS

To produce those nicely flowered 4-in. All-Double Petunias by Easter, a November 1st sowing is none too early. Their remarkable popularity has been won both by their attractiveness as spring pot plants and their ability to "take it" as an outdoor bedding plant where summers are hot. Nice too, as a cut flower; and remember, they are *all* double.

Germination, especially of the All-Doubles and Dwarf Giants, is the one point in their culture that must be watched closely. Mother Nature didn't smother flower seeds under a heavy soil covering, and we believe she was right. Sow in finely sifted peat and soil mixture; don't cover, rather depend upon washing seed down into soil. Constant attention to moisture, shading, and watering carefully will bring them through in a week. Further suggestions on germination go with every packet of seed.

THE ALL-DOUBLE STRAINS

We have again flowered trials of the old and new All-Double strains and have revised our list to contain those we believe most valuable to the florist.

***Victarius Mixture.** The finely fringed All-Double mixture.

½ tr. pkt. (500 seeds), \$1.00; tr. pkt. (1000 seeds), \$2.00; 3 tr. pkts., \$5.00; 1/64 oz., \$6.00; 1/32 oz., \$11.00.

***Pink Perfection.** (World Beauty). Choice carmine-rose-pink. Excellent. Top flower in cut to right.

½ tr. pkt. (500 seeds), \$1.25; tr. pkt. (1000 seeds), \$2.00; 3 tr. pkts., \$5.00; 1/64 oz., \$6.50; 1/32 oz., \$12.50.

***Loveliness.** A shade lighter than Pink Perfection.

½ tr. pkt. (500 seeds), \$1.25; tr. pkt. (1000 seeds), \$2.00; 3 tr. pkts., \$5.00.

***Snowball.** Large, clear, fringed white; the finest double white Petunia.

½ tr. pkt. (500 seeds), \$1.25; tr. pkt. (1000 seeds), \$2.00; 3 tr. pkts., \$5.00.

***Gaiety.** Irregularly marked rose-pink and white; very attractive. Center flower in cut to right.

½ tr. pkt. (500 seeds), \$1.25; tr. pkt. (1000 seeds), \$2.00; 3 tr. pkts., \$5.00.

***Amaranth Red.** Very rich color for bedding or pot plants. Lower flower in cut to right.

½ tr. pkt. (500 seeds), \$1.25; tr. pkt. (1000 seeds), \$2.00; 3 tr. pkts., \$5.00.

***Orchid Beauty.** (New). Nice orchid-lavender; flowers large and well fringed.

½ tr. pkt. only (300 seeds), \$1.25.

***White Glary.** Large peony-flowered (semi-double), white.

½ tr. pkt. (500 seeds), \$1.25; tr. pkt. (1000 seeds), \$2.00; 3 tr. pkts., \$5.00.

DWARF GIANTS

Dwarf Giants come in for their share of popularity as a spring pot plant. A sowing made December 1st will make choice 4-in. plants for April sales. Their large showy flowers make them hard to beat as a pot plant, and where temperatures aren't too extreme they do well outdoors.

No. 1. Ball Dwarf Giants. Finest strain, we believe, available for trueness, large flowers, dwarf habit, and excellent colors.

½ tr. pkt., 75c; tr. pkt., \$1.25; 1/64 oz., \$2.25; 1/32 oz., \$4.00; 1/16 oz., \$7.00.

No. 2. Dwarf Giants, Ramona Strain. Not quite so uniform as our No. 1 stock, but an excellent strain of Dwarf Giant.

½ tr. pkt., 60c; tr. pkt., \$1.00; 1/64 oz., \$1.75; 1/32 oz., \$2.75; 1/16 oz., \$5.00.

(See preceding page for balance of Dwarf Giants).



"Glorious"

(Originated by Frank and Sons, Columbia City, Ind.)

The season's outstanding new Winter Snap. Reddish bronze, an original and striking color. Comes practically 100 per cent true to this color.

½ tr. pkt., \$1.25. Full tr. pkt., \$2.00; 3 for \$5.00. Ready July 15th.



On the extreme ends of all our long greenhouses we annually grow a crop of Winter Snapdragon seed. This segregation insures against crossing, and explains why we are extensively depended upon for Snapdragon seed. Also, this season's seed crop, or most of it, is for next season's selling. This enables us to give it a flowering test, which we do with every variety; further insurance against mixed seed. We guarantee all Snapdragon seed in our containers to be full germination.

GEO. J. BALL, Inc., West Chicago, Illinois